SUPPLEMENTAL MATERIAL

Sex disparity in subsequent outcomes in survivors of coronary heart disease

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	(n=61,167), for women compared to men (reference
	category)

Supplemental Reference Additional references

Supplemental Methods Glossary of terms

Acceptable Patients

Patients are labelled as 'acceptable' for use in research by a process that identifies and excludes patients with non-continuous follow up or patients with poor data recording that raises suspicion as to the validity of the that patients record. Patient data is checked, for the following issues:

- An empty or invalid first registration date
- An empty or invalid current registration date
- Absence of a record for a year of birth
- A first registration date prior to their birth year
- A current registration date prior to their birth year
- A transferred-out reason with no transferred-out date
- A transferred-out date with no transferred-out reason
- A transferred-out date prior to their first registration date
- A transferred-out date prior to their current registration date
- A current registration date prior to their first registration date
- A gender other than Female/Male/Indeterminate
- An age of greater than 115 at end of follow up
- Recorded health care episodes in years prior to birth year
- All recorded health care episodes have empty or invalid event dates
- Registration status of temporary patients

If any of these conditions are true, the patient is labelled unacceptable and is not recommended for use in research.

UTS date

The overall quality of data in practices is mediated by use of an 'up to standard' (UTS) date, which is deemed as the date at which data in the practice is considered to have continuous high-quality data fit for use in research. This is mediated by an analysis on the total data in the practice, which is refreshed every time a new collection for a practice is processed into the database. It is based on two central concepts: assurance of continuity in data recording (gap analysis), and avoidance of use of data for which transferred out and dead patients have been removed (death recording).

The UTS date is set to the latest of these dates for each practice. The CPRD recommend that analyses are performed on data following the practice UTS date.

Supplemental Figure I





a. Incident non-fatal coronary heart disease (CHD) recorded between 1 January 1998 and 31 December 2017 in individuals 18 years and over with at least 12 months of registration with the practice. Practices contributing up-tostandard data and patient primary care record has linkage to HES.

Supplemental Figure II

Distribution of cause mortality events by sex and 5-year age group for patients with incident CHD

(a) Cardiovascular-related mortality



(b) Heart failure



(c) Peripheral vascular disease



Supplemental Figure III

Cumulative incidence function plots for cardiovascular-related mortality, heart failure, and peripheral vascular disease by sex



Supplemental Figure IV

Kaplan-Meier plots for cardiovascular-related mortality, heart failure, and peripheral vascular disease by sex



(b) Heart failure (log-rank, p<0.0001)









Kaplan-Meier cumulative incidence plots for first subsequent major adverse outcomes by sex



Supplemental Figure V (continued ...)





(g) Cardiovascular-related mortality (p = 0.550)



All Kaplan-Meier cumulative incidence plots have been adjusted for age, (continuous variable), socioeconomic status, smoking status, body mass index, blood pressure, total cholesterol level, history of alcohol problem, diabetes mellitus, dyslipidaemia, cancer, chronic kidney disease, hypertension, atrial fibrillation, depression, and a family history of cardiovascular disease.



Supplemental Table I

Clinical codes for identifying individuals with a diagnosis of coronary heart disease (Read, ICD-10 and OPCS 4.6 codes)

CPRD diagnostic codes for identifying CHD in primary care data					
medcode	Read code	Description			
240	G300	Ischaemic heart disease			
241	G3000	Acute myocardial infarction			
1204	G3014	Heart attack			
1344	G340.12	Coronary artery disease			
1414	G33z300	Angina on effort			
1430	G3300	Angina pectoris			
1431	G311.13	Unstable angina			
1676	G3z00	Ischaemic heart disease NOS			
1677	G3015	MI - acute myocardial infarction			
1678	G308.00	Inferior myocardial infarction NOS			
1792	G313	IHD - Ischaemic heart disease			
2491	G3012	Coronary thrombosis			
3704	G307.00	Acute subendocardial infarction			
4017	G3200	Old myocardial infarction			
4656	G311.11	Crescendo angina			
5387	G301.00	Other specified anterior myocardial infarction			
5413	G340.00	Coronary atherosclerosis			
6336	14A5.00	H/O: angina pectoris			
7320	G343.00	Ischaemic cardiomyopathy			
7347	G311100	Unstable angina			
7696	G33z200	Syncope anginosa			
7783	32300	ECG: myocardial infarction			
8568	G3700	Cardiac syndrome X			
8935	G302.00	Acute inferolateral infarction			
9276	G31y000	Acute coronary insufficiency			
9413	G31y.00	Other acute and subacute ischaemic heart disease			
9507	G307000	Acute non-Q wave infarction			
9555	G33z500	Post infarct angina			
10260	6A400	Coronary heart disease review			
10562	G307100	Acute non-ST segment elevation myocardial infarction			
11048	G331.11	Variant angina pectoris			
11648	8B3k.00	Coronary heart disease medication review			
12139	G300.00	Acute anterolateral infarction			
12229	G30X000	Acute ST segment elevation myocardial infarction			
12804	G33z700	Stable angina			
12986	G331.00	Prinzmetal's angina			
13185	662K.00	Angina control			

13566	G3011	Attack - heart
13571	G3016	Thrombosis - coronary
14658	G30z.00	Acute myocardial infarction NOS
14782	662K200	Angina control - improving
14897	G301z00	Anterior myocardial infarction NOS
14898	G305.00	Lateral myocardial infarction NOS
15349	662Kz00	Angina control NOS
15373	662K100	Angina control - poor
15661	G310.11	Dressler's syndrome
15754	G34z.00	Other chronic ischaemic heart disease NOS
16408	G3211	Healed myocardial infarction
17133	G30A.00	Mural thrombosis
17307	G311200	Angina at rest
17464	G3212	Personal history of myocardial infarction
17689	G3017	Silent myocardial infarction
17872	G301100	Acute anteroseptal infarction
18118	G311400	Worsening angina
18125	G330000	Nocturnal angina
18135	6A200	Coronary heart disease annual review
18842	G3500	Subsequent myocardial infarction
18889	G34z000	Asymptomatic coronary heart disease
19542	662K000	Angina control - good
19655	G311.14	Angina at rest
20095	G330.00	Angina decubitus
20416	G312	Atherosclerotic heart disease
21844	G31y300	Transient myocardial ischaemia
22383	G3y00	Other specified ischaemic heart disease
23078	G34y100	Chronic myocardial ischaemia
23579	G310.00	Post-myocardial infarction syndrome
23708	G361.00	Atrial septal defect/current complication following acute myocardial infarct
23892	G304.00	Posterior myocardial infarction NOS
24126	G360.00	Haemopericardium/current comp following acute myocardial infarct
24540	G34y000	Chronic coronary insufficiency
24783	G311	Arteriosclerotic heart disease
25842	G33z.00	Angina pectoris NOS
26863	G33z600	New onset angina
26972	3234.00	ECG: posterior/inferior infarct
26975	3233.00	ECG: antero-septal infarct.
27951	G3100	Other acute and subacute ischaemic heart disease
27977	G31yz00	Other acute and subacute ischaemic heart disease NOS
28138	G3400	Other chronic ischaemic heart disease
28554	G33zz00	Angina pectoris NOS
28736	G30y000	Acute atrial infarction

29300	662K300	Angina control - worsening
29421	G344.00	Silent myocardial ischaemia
29553	G366.00	Thrombosis atrium, auric append & vent/current comp following acute MI
29643	G303.00	Acute inferoposterior infarction
29758	G30X.00	Acute transmural myocardial infarction of unspecified site
29902	G330z00	Angina decubitus NOS
30330	G309.00	Acute Q-wave infarct
30421	G3013	Cardiac rupture following myocardial infarction (MI)
32272	G3800	Postoperative myocardial infarction
32854	G30B.00	Acute posterolateral myocardial infarction
34328	G311300	Refractory angina
34633	G34y.00	Other specified chronic ischaemic heart disease
34803	G30y.00	Other acute myocardial infarction
35119	G501.00	Post infarction pericarditis
35674	14A3.00	H/O: myocardial infarct <60
35713	G34yz00	Other specified chronic ischaemic heart disease NOS
36423	G3600	Certain current complication following acute myocardial infarct
36523	G311.00	Pre-infarction syndrome
36854	G332.00	Coronary artery spasm
37657	G362.00	Ventricular septal defect/current comp for acute myocardial infarction
38609	G351.00	Subsequent myocardial infarction of inferior wall
39449	G312.00	Coronary thrombosis not resulting in myocardial infarction
39546	Gyu3000	[X]Other forms of angina pectoris
39655	G311.12	Impending infarction
39693	G31y200	Subendocardial ischaemia
40399	14A4.00	H/O: myocardial infarct >60
40429	G301000	Acute anteroapical infarction
41221	G30y200	Acute septal infarction
41835	G384.00	Postoperative subendocardial myocardial infarction
45809	G350.00	Subsequent myocardial infarction of anterior wall
45960	8B27.00	Antianginal therapy
46017	G30yz00	Other acute myocardial infarction NOS
46112	G380.00	Postoperative transmural myocardial infarction anterior wall
46166	G35X.00	Subsequent myocardial infarction of unspecified site
46276	G381.00	Postoperative transmural myocardial infarction inferior wall
47637	Gyu3300	[X]Other forms of chronic ischaemic heart disease
50372	14AH.00	H/O: Myocardial infarction in last year
52517	Gyu3.00	[X]Ischaemic heart diseases
52705	3236.00	ECG: lateral infarction
54251	G311z00	Pre-infarction syndrome NOS
54535	G33z100	Stenocardia
55137	G311011	MI - myocardial infarction aborted
55401	3235.00	ECG: subendocardial infarct

57062	14AJ.00	H/O: Angina in last year
59032	323Z.00	ECG: myocardial infarct NOS
59189	G363.00	Ruptured cardiac wall without haemopericard/cur comp fol ac MI
59940	G364.00	Ruptured chordae tendinae/curr comp fol acute myocardial infarct
61072	G311000	Myocardial infarction aborted
61670	889A.00	Diabetes mellitus insulin-glucose infus acute myocardial infarct
62626	G30y100	Acute papillary muscle infarction
63467	G306.00	True posterior myocardial infarction
66388	G33z000	Status anginosus
68357	G31y100	Microinfarction of heart
68401	Gyu3200	[X]Other forms of acute ischaemic heart disease
68748	G38z.00	Postoperative myocardial infarction, unspecified
69474	G365.00	Rupture papillary muscle/current comp following acute myocardial infarct
72562	G353.00	Subsequent myocardial infarction of other sites
95550	8H2V.00	Admit ischaemic heart disease emergency
96838	Gyu3400	[X]Acute transmural myocardial infarction of unspecified site

ICD-10 codes (HES) for identifying CHD from hospital admissions

120, 121, 122, 123, 124, 125, 295.5

OPCS 4.6 codes (HES) for identifying CHD from revascularization procedures

K40, K41, K42, K43, K44, K45, K46, K47.1, K49, K50, K75

Supplemental Table II

Number (proportion) of people with missing data on risk factors, by sex

Variables	All	Men	Women
Valiables	n=143,702	[n=80,624 (56.1)]	[n=63,078 (43.9)]
Low density lipoprotein cholesterol (mmol/L)	90,116 (62.7)	50,108 (62.2)	40,008 (63.4)
High density lipoprotein cholesterol (mmol/L)	78,312 (54.5)	43,420 (53.9)	34,892 (55.3)
Body mass index (kg/m ²)	72,224 (50.3)	41,098 (51.0)	31,126 (49.4)
Total cholesterol (mmol/L)	62,517 (43.5)	34,655 (43.0)	27,862 (44.2)
Diastolic blood pressure (mmHg)	25,155 (17.5)	16,347 (20.3)	8,808 (14.0)
Systolic blood pressure (mmHg)	25,121 (17.5)	16,337 (20.3)	8,784 (13.9)

Supplemental Table III

Differences in characteristics between those with and without missing data, by sex

	Men		Women			
	Without missing data	With missing data *	<i>p</i> -value	Without missing data	With missing data *	<i>p</i> -value
Number (proportion, %)	20,336 (25.2)	60,288 (74.8)		15,558 (24.7)	47,520 (75.3)	
Age (years)	65 (56 – 75)	67 (58 – 75)	0.0001	70 (62 – 78)	74 (63 – 82)	0.0001
Ethnicity			< 0.001			< 0.001
Asian	944 (4.6)	1,258 (2.1)		641 (4.1)	707 (1.5)	
Black	191 (0.9)	313 (0.5)		206 (1.3)	249 (0.5)	
Mixed	70 (0.3)	139 (0.2)		60 (0.4)	92 (0.2)	
Other	225 (1.1)	502 (0.8)		174 (1.1)	273 (0.6)	
White	18,193 (89.5)	54,651 (90.7)		14,058 (90.4)	43,334 (91.2)	
Unknown	713 (3.5)	3,425 (5.7)		419 (2.7)	2,865 (6.0)	
Index of Multiple Deprivation			< 0.001			< 0.001
1 (Least deprived)	4,781 (23.5)	13,181 (21.9)		3,093 (19.9)	9,218 (19.4)	
2	4,407 (21.7)	13,556 (22.5)		3,224 (20.7)	10,225 (21.5)	
3	4,066 (20.0)	12,897 (21.4)		3,080 (19.8)	10,216 (21.5)	
4	3,742 (18.4)	10,765 (17.9)		3,152 (20.3)	9,149 (19.3)	
5 (Most deprived)	3,319 (16.3)	9,803 (16.3)		3,000 (19.3)	8,632 (18.2)	
Unknown	21 (0.1)	86 (0.1)		9 (0.1)	80 (0.2)	
Current smokers	3,919 (19.3)	13,745 (22.8)	< 0.001	2,569 (16.5)	7,517 (15.8)	0.04
Alcohol problem	759 (3.7)	1,841 (3.1)	< 0.001	260 (1.7)	596 (1.3)	< 0.001
Comorbidities						
Atrial fibrillation	1,875 (9.2)	4,147 (6.9)	< 0.001	1,415 (9.1)	3,849 (8.1)	< 0.001
Cancer	3,070 (15.1)	6,884 (11.4)	< 0.001	2,303 (14.8)	6,054 (12.7)	< 0.001
Chronic kidney disease	2,583 (12.7)	2,962 (4.9)	< 0.001	2,823 (18.2)	3,976 (8.4)	< 0.001
COPD	1,658 (8.2)	3,644 (6.0)	< 0.001	1,219 (7.8)	2,921 (6.2)	< 0.001
Depression	3,330 (16.4)	7,715 (12.8)	< 0.001	4,356 (28.0)	10,566 (22.2)	< 0.001
Diabetes mellitus	6,646 (32.7)	4,757 (7.9)	< 0.001	4,667 (30.0)	3,791 (8.0)	<0.001
Type-1 diabetes	458 (2.3)	440 (0.7)	< 0.001	327 (2.1)	390 (0.8)	< 0.001
Type-2 diabetes	5,996 (29.5)	3,412 (5.7)	< 0.001	4,201 (27.0)	2,629 (5.5)	< 0.001

Dyslipidaemia	4,036 (19.9)	5,300 (8.8)	< 0.001	3,527 (22.7)	4,440 (9.3)	<0.001
Family history of coronary heart disease	4,668 (23.0)	9,349 (15.5)	<0.001	4,203 (27.0)	8,308 (17.5)	<0.001
Family history of cardiovascular disease	5,995 (29.5)	11,957 (19.8)	<0.001	5,341 (34.3)	10,920 (23.0)	<0.001
Hypertension	11,778 (57.9)	19,758 (32.8)	<0.001	10,095 (64.9)	20,862 (43.9)	< 0.001
Hypothyroidism	725 (3.6)	1,377 (2.3)	<0.001	2,283 (14.7)	4,769 (10.0)	<0.001
Lupus erythematosus	17 (0.1)	60 (0.1)	0.525	71 (0.5)	176 (0.4)	0.136
Migraine	804 (4.0)	1,972 (3.3)	<0.001	1,553 (10.0)	3,468 (7.3)	<0.001
Moderate-severe liver disease	96 (0.5)	154 (0.3)	<0.001	81 (0.5)	121 (0.3)	<0.001
Rheumatoid arthritis	248 (1.2)	715 (1.2)	0.703	389 (2.5)	1,224 (2.6)	0.605
Severe mental illness	244 (1.2)	414 (0.7)	< 0.001	243 (1.6)	470 (1.0)	< 0.001
Transient ischaemic attack	807 (4.0)	1,727 (2.9)	< 0.001	792 (5.1)	1,833 93.9)	< 0.001
Drug prescription						
Anti-arrhythmic	903 (4.4)	2,445 (4.1)	0.017	1,008 (6.5)	2,990 (6.3)	0.406
Anti-coagulant	1,424 (7.0)	3,145 (5.2)	< 0.001	1,062 96.8)	2,798 (5.9)	< 0.001
Anti-depressant	3,642 (17.9)	8,603 (14.3)	< 0.001	4,997 (32.1)	12,897 (27.1)	< 0.001
Anti-diabetic	5,462 (26.9)	3,809 (6.3)	< 0.001	3,777 (24.3)	3,122 (6.6)	< 0.001
Anti-epileptic	1,392 (6.9)	3,220 (5.3)	< 0.001	1,566 (10.1)	3,568 (7.5)	< 0.001
Anti-hypertensive	14,097 (69.3)	25,641 (42.5)	< 0.001	11,689 (75.1)	25,753 (54.2)	< 0.001
Antiplatelets	9,039 (44.5)	16,326 (27.1)	< 0.001	7,140 (45.9)	15,294 (32.2)	< 0.001
Beta-blockers	6,384 (31.4)	13,719 (22.8)	< 0.001	5,662 (36.4)	13,927 (29.3)	< 0.001
Corticosteroid	2,196 (10.8)	5,364 (8.9)	< 0.001	2,489 (16.0)	6,492 (13.7)	<0.001
Diuretics	6,429 (31.6)	13,640 (22.6)	< 0.001	7,421 (47.7)	20,395 (42.9)	< 0.001
Statin			< 0.001			< 0.001
Low intensity	1,172 (5.8)	1,806 (3.0)		1,154 (7.4)	1,678 (3.5)	
Moderate intensity	7,992 (39.3)	8,954 (14.9)		5,743 (36.9)	6,642 (14.0)	
High intensity	2,365 (11.6)	2,172 (3.6)		1,851 (11.9)	1,642 (3.5)	

* Individuals included in the "with missing data" group had missing data on at least one of the risk factors: body mass index, systolic and diastolic blood pressures, HDL cholesterol, LDL cholesterol or total cholesterol

Supplemental Table IV

Age-adjusted prevalence rate for comorbidities, risk factors and prescribed medications

Characteristics	Men, n (%) 80,624 (56.1)	Women, n (%) 63,078 (43.9)
Age (years), Median (IQR)	66 (56 – 75)	73 (63 – 81)
Age (years), Mean (SD)	65.6 (12.9)	71.4 (13.3)
Comorbidities and risk factors		
Atrial fibrillation	8.5 (8.3 - 8.7)	7.2 (7.0 – 7.4)
Cancer	14.1 (13.8 - 14.3)	12.1 (11.8 - 12.3)
Chronic kidney disease	8.2 (8.0 - 8.4)	9.3 (9.1 – 9.5)
COPD	7.2 (7.0 – 7.4)	6.3 (6.1 - 6.5)
Depression	13.0 (12.8 - 13.2)	25.6 (25.3 – 26.0)
Diabetes mellitus	14.4 (14.1 - 14.6)	13.5 (13.2 - 13.8)
Type-1 diabetes	1.1 (1.0 - 1.1)	1.3 (1.1 - 1.3)
Type-2 diabetes	11.9 (11.7 – 12.2)	10.8 (10.6 - 11.1)
Dyslipidaemia	11.2 (10.9 - 11.4)	12.9 (12.6 - 13.1)
Family history of coronary heart disease	16.3 (16.0 – 16.5)	21.7 (21.3 – 22.0)
Family history of cardiovascular disease	21.0 (20.8 - 21.3)	27.7 (27.4 - 28.1)
Hypertension	40.6 (40.3 - 40.9)	46.9 (46.5 - 47.3)
Hypothyroidism	2.8 (2.7 – 2.9)	10.9 (10.6 - 11.1)
Lupus erythematosus	0.1 (0.1 - 0.1)	0.4 (0.3 - 0.5)
Migraine	3.2 (3.1 - 3.3)	9.1 (8.8 - 9.3)
Moderate-severe liver disease	0.3 (0.2 - 0.3)	0.3 (0.3 - 0.4)
Rheumatoid arthritis	1.2 (1.2 - 1.3)	2.5 (2.4 – 2.6)
Severe mental illness	0.8 (0.7 - 0.8)	1.1 (1.1 – 1.3)
Transient ischaemic attack	3.6 (3.5 - 3.7)	3.6 (3.5 - 3.8)
Medication prescriptions		
Anti-arrhythmic	4.3 (4.1 - 4.4)	6.3 (6.1 - 6.5)
Anti-coagulant	6.2 (6.0 - 6.4)	5.6 (5.5 – 5.8)
Anti-depressant	15.0 (14.7 – 15.2)	29.6 (29.3 - 30.0)
Anti-diabetic	11.6 (11.4 - 11.8)	11.2 (10.9 - 11.5)
Anti-epileptic	5.6 (5.5 – 5.8)	8.7 (8.5 – 8.9)
Anti-hypertensive	50.4 (50.1 - 50.8)	58.1 (57.7 - 58.5)
Antiplatelets	33.0 (32.6 - 33.3)	34.1 (33.8 - 34.5)
Beta-blockers	25.2 (24.8 - 25.5)	30.8 (30.5 - 31.2)
Corticosteroid	9.9 (9.7 - 10.1)	14.2 (13.9 - 14.5)
Diuretics	27.4 (27.0 – 27.7)	40.7 (40.3 - 41.1)
Low-intensity statin	3.7 (3.6 - 3.9)	4.5 (4.3 - 4.7)
Moderate-intensity statin	20.8 (20.5 - 21.1)	20.0 (19.6 - 20.3)
High-intensity statin	5.4 (5.2 - 5.5)	5.9 (5.7 - 6.1)

Age-adjusted prevalence presented as proportion (%) with 95% confidence interval.

IQR: inter-quartile range; SD: standard deviation

Supplemental Table V

Incidence of first subsequent major adverse outcomes occurring after 30 days of incident coronary heart disease (n = 136,326).

	Median time to outcome (years)	Cases	Person- years *	Incidence rate (per 100 person-years)	Adjusted incidence rate ratio [†]
MACE (All)	0.88 (0.24 - 3.28)	76,571	4,500	17.06 (16.94 - 17.18)	
Men	0.69 (0.22 - 2.83)	45,945	2,300	19.62 (19.44 - 19.80)	Reference
Women	1.20 (0.30 - 3.92)	30,626	2,100	14.26 (14.10 - 14.42)	0.66 (0.65 - 0.67)
Coronary heart disease (All)	0.58 (0.21 – 2.25)	52,946	4,800	11.03 (10.94 - 11.13)	
Men	0.51 (0.19 - 1.97)	34,434	2,500	13.70 (13.54 - 13.82)	Reference
Women	0.79 (0.24 – 2.75)	18,512	2,300	8.11 (8.00 - 8.23)	0.59 (0.58 - 0.60)
Stroke (All)	2.93 (1.02 - 6.18)	6,196	7,500	0.83 (0.81 - 0.85)	
Men	2.82 (0.95 - 6.04)	2,806	4,300	0.65 (0.63 - 0.68)	Reference
Women	3.03 (1.08 - 6.27)	3,390	3,200	1.07 (1.03 - 1.10)	1.20 (1.14 - 1.26)
Peripheral arterial disease (All)	2.22 (0.68 - 5.31)	1,864	7,500	0.25 (0.24 - 0.26)	
Men	2.12 (0.62 - 5.21)	1,084	4,300	0.25 (0.24 – 0.27)	Reference
Women	2.47 (0.77 - 5.42)	780	3,200	0.24 (0.23 - 0.26)	0.82 (0.74 - 0.90)
Heart failure (All)	1.32 (0.33 - 4.30)	8,791	7,400	1.19 (1.17 - 1.22)	
Men	1.09 (0.28 - 3.98)	4,415	4,200	1.04 (1.01 - 1.07)	Reference
Women	1.58 (0.38 - 4.65)	4,376	3,100	1.39 (1.35 - 1.44)	0.94 (0.90 - 0.98)
Cardiovascular mortality (All)	2.47 (0.57 – 5.93)	6,774	7,600	0.89 (0.86 - 0.91)	
Men	2.42 (0.60 - 5.89)	3,206	4,400	0.73 (0.71 – 0.76)	Reference
Women	2.52 (0.54 - 5.94)	3,568	3,300	1.08 (1.06 - 1.13)	0.89 (0.85 - 0.94)
All-cause mortality (All)	2.98 (0.85 - 6.59)	25,622	7,900	3.26 (3.22 - 3.30)	
Men	2.83 (0.81 - 6.40)	12,093	4,500	2.70 (2.65 – 2.75)	Reference
Women	3.12 (0.91 - 6.80)	13,529	3,400	4.00 (3.93 - 4.07)	0.92 (0.90 – 0.95)

* 100 person-years at risk; All – both men and women; Follow-up time: median follow-up time in years reported with interquartile range.

[†] Incident rate ratio adjusted for age (continuous variable) and index of multiple deprivation (socioeconomic status).

Supplemental Table VI

Risk of first subsequent major adverse outcomes occurring after 30 days of incident coronary heart disease for women compared to men (reference category). n = 136,326

	Traditional Cox model	Competing risks model *		
	Hazard ratio (95% CI)	Sub-hazard ratio (95% CI)		
Full adjusted models				
Major adverse cardiovascular event	0.70 (0.69 - 0.71)	0.71 (0.70 - 0.72)		
Coronary heart disease	0.63 (0.62 - 0.64)	0.64 (0.63 - 0.65)		
Stroke	1.21 (1.15 - 1.28)	1.27 (1.20 - 1.34)		
Peripheral vascular disease	0.84 (0.77 – 0.93)	0.87 (0.78 – 0.96)		
Heart failure	1.01 (0.96 - 1.05)	1.04 (0.99 - 1.08)		
Cardiovascular-related death	0.94 (0.89 – 0.99)	0.99 (0.94 - 1.04)		
All-cause mortality	1.01 (0.98 - 1.04)	1.08 (1.05 - 1.11)		

 \ast Fine and Gray method for sub-distribution regression with competing risks^{26}

Models adjusted for age, (continuous variable), socioeconomic status, smoking status, body mass index, blood pressure, total cholesterol level, history of alcohol problem, diabetes mellitus, dyslipidaemia, cancer, chronic kidney disease, hypertension, atrial fibrillation, depression, and a family history of cardiovascular disease.

Supplemental Table VII

Risk of first subsequent major adverse outcomes by time of incident CHD diagnosis (1998-2007 vs 2008-2017), for women compared to men (reference category).

	1998 – 2007 (n=77,586) Hazard ratio (95% CI)	2008 – 2017 (n=66,116) Hazard ratio (95% CI)
Full adjusted Cox models		
Major adverse cardiovascular event	0.67 (0.66 – 0.69)	0.67 (0.65 – 0.68)
Coronary heart disease	0.61 (0.60 - 0.62)	0.60 (0.58 - 0.61)
Stroke	1.30 (1.21 - 1.40)	1.20 (1.09 - 1.31)
Peripheral vascular disease	0.94 (0.83 - 1.07)	0.88 (0.74 - 1.06)
Heart failure	1.10 (1.03 - 1.17)	1.09 (1.01 - 1.17)
Cardiovascular-related death	0.96 (0.91 - 1.01)	1.03 (0.96 - 1.11)
All-cause mortality	1.02 (0.99 - 1.05)	1.09 (1.05 - 1.13)

Models adjusted for age, (continuous variable), socioeconomic status, smoking status, body mass index, blood pressure, total cholesterol level, history of alcohol problem, diabetes mellitus, dyslipidaemia, cancer, chronic kidney disease, hypertension, atrial fibrillation, depression, and a family history of cardiovascular disease.

Supplemental Table VIII

Risk of first subsequent major adverse outcomes in individuals with incident myocardial infarction diagnosis (n=61,167), for women compared to men (reference category).

	Traditional Cox model Hazard ratio (95% CI)
Major adverse cardiovascular event ($n=49,127$)	0.79 (0.77 – 0.80)
Coronary heart disease (n=38,904)	0.74 (0.72 – 0.76)
Stroke (n=1,706)	1.35 (1.22 - 1.50)
Peripheral vascular disease (n=534)	0.95 (0.79 – 1.14)
Heart failure (n=3,264)	1.21 (1.12 - 1.30)
Cardiovascular-related death (n=4,719)	1.10 (1.03 - 1.17)
All-cause mortality (n=10,284)	1.17 (1.12 – 1.22)