SUPPLEMENTAL MATERIAL

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Supplemental Methods

Data linkage

Approximately 75% of English CPRD practices have consented to participate in a linkage scheme, providing linked patient-level data from sources including the Office for National Statistics (ONS) for mortality information, Hospital Episode Statistics (HES) for hospitalisation data and deprivation data (Index of Multiple Deprivation (IMD 2010)).[1] The IMD is a measure of deprivation at the small area level (Lower Layer Super Output Area (LSOA)), which is made up of 7 domain indices related to: income, employment, health, education, housing and crime.[2] Patient-level IMD information is available for the subgroup of English practices that have consented to linkage, based on LSOA of residence.

Due to this restriction in participating practices, linkage reduces the sample size and may result in a loss of geographical generalisability; however, combining data sources can provide a more enriched and comprehensive dataset.[3,4] Importantly, linking to hospital and death records allows for identification of further cases of MACE.[3] Recording of secondary care information into patient primary care records is generally inputted manually from hospital discharge letters or referral notes. This can result in under-recording, inaccuracies, and delays in the recording of diagnoses made in secondary care. [3] A comparison between CPRD and secondary care data on the incidence of myocardial infarction identified a 25% lower rate when using CPRD data alone compared to using fully-linked data. [3] Using a combination of CPRD, HES, and ONS data was particularly important for this study to try and reduce the potential of underestimation of cardiovascular events and identification of cardiovascular deaths.

Definition of baseline biological variables

To increase data availability for defining obesity and chronic kidney disease, diagnostic Read codes and test values were sourced. Obesity was defined using Read codes indicative of obesity and body mass index measurements (BMI≥30 kg/m^2). Chronic kidney disease was defined using Read codes for stage 3 and above or an estimated glomerular filtration rate < 60 ml/min.

Elevated HbA1c was defined as a value >7% (53mmol/mol) and >8% (64mmol/mol). These HbA1c levels were chosen as they correspond to the recommended HbA1c targets in the National Institute for Health and Care Excellence (NICE) guidelines for management of type 2 diabetes.[5] High blood pressure was defined as measurements >140/80mmHg or >130/80mmHg in those with target organ damage. Hypercholesterolaemia was defined as total cholesterol>4mmol/L or LDL cholesterol>2mmol/L.

Microalbuminuria was defined as an albumin:creatinine ratio (ACR) value of 3.5-30 mg/mmol in women and 2.5-30 mg/mmol in men. Proteinuria was defined as an ACR value > 30 mg/mmol or a protein:creatinine ratio (PCR) value > 40 mg/mmol.

Definition of baseline risk factor control

Recorded HbA1c, blood pressure and cholesterol measurements were used to define risk factor control.

Baseline hyperglycaemia (HbA1c >7% [53mmol/mol]), hypertension (blood pressure >140/80mmHg or >130/80mmHg for those with target organ damage) and hypercholesterolaemia (total cholesterol>4mmol/L or LDL cholesterol>2mmol/L) were defined as 2 consecutive test values above the threshold cut-offs, up to 6 months before and 3 months after the index date (diabetes diagnosis date or corresponding index date for controls).

The proportion of T2DM patients with missing data on risk factors at baseline was 17.8% for hyperglycaemia, 29.5% for hypertension and 65.8% for elevated cholesterol.

Charlson Comorbidity Index (CCI)

Comparison of original CCI to the CCI used in this study. Diabetes and cardiovascular conditions were excluded from the score.

The CCI was defined at baseline using Read codes, up to the index date.

Supplemental Table 1: Conditions included in CCI variable

Original CCI		CCI used in this study	
Comorbid condition	**Weight**	**Comorbid condition**	**Weight**
Myocardial infarction	1	-	-
Congestive heart failure	1	-	-
Peripheral vascular disease	1	-	-
Cerebrovascular disease	1	-	-
Dementia	1	Dementia	1
Chronic pulmonary disease	1	Chronic pulmonary disease	1
Connective tissue disease	1	Connective tissue disease	1
Diabetes without complications	1	-	-
Peptic ulcer disease	1	Peptic ulcer disease	1
Mild liver disease	1	Mild liver disease	1
Hemiplegia	2	Hemiplegia	2
Moderate or severe renal disease	2	Moderate or severe renal disease	2
Diabetes with complications	2	-	-
Cancer	2	Cancer	2
Moderate or severe liver disease	3	Moderate or severe liver disease	3
Metastatic solid tumour	6	Metastatic solid tumour	6
AIDS	6	AIDS	6

Multiple Imputation

Multiple imputation was implemented using the two-fold fully conditional specification algorithm to impute missing longitudinal data (annual measurements for obesity, hypertension, hypercholesterolaemia and raised HbA1c). This algorithm has been validated for use in electronic health care databases where the pattern of missing longitudinal data tends to be intermittent and potentially non-monotonic.[6,7] Missing values at a specific time point are imputed from a model using information from that time point and immediately adjacent time points (default time window width is 1).[6,7] This approach increases the plausibility of the missing at random assumption by using repeated measures over time.[5]

Imputation models were estimated separately for men and women with a 2-year time window around missing data time points used. We implemented a time window width of 2 to increase the availability of information being used to impute missing values. In a simulation study this increase in time window width to 2 showed slight improvements in bias and precision compared to a time window width of 1.[8] Data measurements past 2 years were unlikely to provide substantial additional information. Factors included in the imputation model were: age, diabetes status, ethnicity, deprivation, calendar year, history of cardiovascular disease at index date, baseline measures of smoking status, obesity, HbA1c, hypertension and hypercholesterolaemia, longitudinal measures of smoking status, obesity, HbA1c, hypertension and hypercholesterolaemia and the cardiovascular outcome. Five imputed datasets were generated and combined.

Sensitivity Analyses

Major cardiovascular event risk associated with diabetes

Data was stratified into two time periods, diabetes diagnoses between 2007-2010 and 2011-2013 to allow for comparison between a time period close to the introduction and implementation of guidelines and QOF and a later period.

Sex-specific hazard ratios were estimated from Cox proportional hazard models in both time periods for the primary (MI, stroke and cardiovascular death) and secondary outcomes (fatal/non-fatal MI and non-fatal stroke) in people with type 2 diabetes compared to controls without diabetes. Four models were applied; 1) unadjusted, 2) adjusted for baseline calendar year, age, ethnicity, and deprivation, 3) additional adjustment for baseline smoking, obesity, hypertension, hypercholesterolaemia, and Charlson Comorbidity Index, and 4) further adjustment for time-varying smoking, obesity, hypertension, hypercholesterolaemia and raised HbA1c.

Attainment of Standards of Care

Prevalent CVD was expected to be greater in men and those with any history of CVD were likely to be treated more aggressively; therefore, we assessed for sex differences within type 2 diabetes groups with and without prevalent CVD for specific standards of care indicators to observe any treatment and management differences. This included the following indicators: “last measured total cholesterol levels below the recommended target of 5 mmol/L”, “last blood pressure ≤140/80mmHg” and “treated with statins”.

We also assessed for sex-related treatment bias in those aged <50 years and ≥50 years in part because some drugs with teratogenic effects are not recommended in women of child-bearing age. This related to the indicators: “treated with ACE inhibitors for microalbuminuria/proteinuria” and “treated with statins”.

Multiple logistic regression models were used to assess sex differences in attainment of standard of care indicators within follow-up time bands.

Supplemental Tables

Supplemental Table 2. Baseline clinical characteristics of people with type 2 diabetes at diagnosis by CVD status

	T2DM (N=79,985)			
	Without CVD (N=63,718)		With CVD (N=16,267)	
	Women	Men	Women	Men
n, %	29,348 (46.1)	34,370 (54.0)	6,048 (37.2)	10,219 (62.8)
Age, years	62.1±14.2	59.0±12.7	72.8±11.4	68.9±10.7
Ethnicity				
White	22,700 (77.4)	25,452 (74.1)	5,390 (89.1)	9,069 (88.8)
South Asian	1,402 (4.8)	1,534 (4.5)	142 (2.4)	258 (2.5)
Black	714 (2.4)	668 (1.9)	70 (1.2)	80 (0.8)
Other	368 (1.3)	442 (1.3)	32 (0.5)	65 (0.6)
Unknown	4,164 (14.2)	6,274 (18.3)	414 (6.9)	747 (7.3)
Deprivation				
IMD 1 (least deprived)	5,390 (18.4)	6,925 (20.2)	940 (15.5)	1,885 (18.5)
IMD 2	6,288 (21.4)	7,884 (22.9)	1,336 (22.1)	2,341 (22.9)
IMD 3	5,915 (20.2)	6,970 (20.3)	1,148 (19.0)	2,069 (20.3)
IMD 4	6,284 (21.4)	6,894 (20.1)	1,330 (22.0)	2,067 (20.2)
IMD 5 (most deprived)	5,426 (18.5)	5,666 (16.5)	1,282 (21.2)	1,844 (18.0)
Unknown	45 (0.2)	31 (1.0)	12 (0.2)	13 (0.1)
Obese	15,879 (54.1)	17,395 (50.6)	2,638 (43.6)	4,616 (45.2)
Smoking				
Current	8,698 (29.5)	14,617 (42.5)	2,505 (41.4)	6,266 (61.3)
Ex-smoker	8,285 (28.3)	9,182 (26.7)	1,638 (27.1)	2,382 (23.3)
Never	1,692 (5.8)	1,218 (3.5)	300 (5.0)	250 (2.5)
Unknown	10,673 (36.4)	9,353 (27.2)	1,605 (26.5)	1,321 (12.9)
HbA1c >7% (53mmol/mol)	13,413 (45.7)	17,604 (51.2)	2,406 (39.8)	4,263 (41.7)
HbA1c >8% (64mmol/mol)	7,733 (26.4)	11,490 (33.4)	1,111 (18.4)	2,109 (20.6)
BP>140/80 mmHg	9,281 (31.6)	12,025 (35.0)	1,401 (23.2)	2,174 (21.3)
BP>130/80 mmHg	13,208 (45.0)	15,978 (46.5)	2,369 (39.2)	3,660 (35.8)
with target organ damage	3,009 (10.3)	1,889 (5.5)	1,528 (25.3)	1,771 (17.3)
Hypercholesterolaemia*	7,709 (26.3)	8,406 (24.5)	1,264 (20.9)	1,838 (18.0)
Risk factors in control †				
1 RF in control	12,024 (41.0)	13,223 (38.5)	2,585 (42.7)	4,305 (42.1)
2 RF in control	3,711 (12.6)	3,689 (10.7)	1,105 (18.3)	2,126 (20.8)
3 RF in control	326 (1.1)	419 (1.2)	178 (2.9)	399 (3.9)
Cardiovascular disease	-	-	6,048 (100.0)	10,219 (100.0)
Coronary heart disease	-	-	3,910 (64.7)	7,506 (73.5)
Cerebrovascular disease	-	-	2,175 (36.0)	2,737 (26.8)
Peripheral vascular disease	-	-	946 (15.6)	1,808 (17.7)
Chronic kidney disease	5,474 (18.7)	3,302 (9.6)	2,447 (40.5)	2,672 (26.2)
Microalbuminuria or proteinuria	2,653 (9.0)	4,318 (12.6)	763 (12.6)	1,605 (15.7)
Peripheral neuropathy	241 (0.8)	331 (1.0)	102 (1.7)	196 (1.9)
Retinopathy	1,023 (3.5)	1,334 (3.9)	255 (4.2)	491 (4.8)
History of pregnancy	9,055 (30.9)	-	1,257 (20.8)	-
Hormone-replacement therapy (current use) ‡	396 (1.4)	-	55 (0.9)	-
Oral contraceptives (current use)‡	391 (1.3)	-	6 (0.1)	-

Data presented as N(%) or mean±SD * total cholesterol>4mmol/L or LDL cholesterol>2mmol/L
† HbA1c <7% (53mmol/mol); BP < 130/80mmHg; lipids: total cholesterol<4mmol/L or LDL cholesterol<2mmol/L
‡ Current use defined as prescriptions up to 90 days prior to index date

Supplemental Table 3. Overall and sex-specific cardiovascular incidence rates in patients with type 2 diabetes and controls

	T2DM (N=79,985)						Controls (N=386,547)					
	All		Women (N=35,396)		Men (N=44,589)		All		Women (N=172,994)		Men (N=213,553)	
	n	IR (95% CI)	n	IR (95% CI)	n	IR (95% CI)	n	IR (95% CI)	n	IR (95% CI)	n	IR (95% CI)
Including individuals with prevalent CVD												
MACE	9,806	32.6 (31.9-33.2)	4,091	30.5 (29.6-31.5)	5,715	34.2 (33.3-35.1)	30,226	22.0 (21.7-22.2)	12,850	20.4 (20.0-20.7)	17,376	23.4 (23.0-23.7)
MI*	6,697	22.2 (21.7-22.8)	2,640	19.7 (19.0-20.5)	4,057	25.3 (23.5-25.0)	17,883	13.0 (12.8-13.2)	7,063	11.2 (10.9-11.5)	10,820	14.5 (14.3-14.8)
Stroke*	2,016	6.7 (6.4-7.0)	963	7.2 (6.7-7.7)	1,053	6.3 (5.9-6.7)	7,756	5.6 (5.5-5.8)	3,750	5.9 (5.8-6.1)	4,006	5.4 (5.2-5.6)
Non-fatal MI	6,453	21.4 (20.9-22.0)	2,558	19.1 (18.4-19.9)	3,895	23.3 (22.6-24.1)	16,999	12.4 (12.2-12.5)	6,735	10.7 (10.4-10.9)	10,264	13.8 (13.5-14.1)
Excluding individuals with prevalent CVD												
MACE	4,564	18.2 (17.6-18.7)	2,042	17.6 (16.8-18.3)	2,522	18.7 (18.0-19.4)	11,665	11.4 (11.2-11.6)	5,364	10.9 (10.6-11.2)	6,301	11.9 (11.6-12.2)
MI*	2,697	10.7 (10.3-11.1)	1,118	9.6 (9.1-10.2)	1,579	11.7 (11.1-12.3)	6,111	6.0 (5.8-6.1)	2,524	5.1 (4.9-5.3)	3,587	6.8 (6.6-7.0)
Stroke*	1,230	4.9 (4.6-5.2)	621	5.3 (4.9-5.8)	609	4.5 (4.2-4.9)	3,641	3.6 (3.5-3.7)	1,912	3.9 (3.7-4.1)	1,729	3.3 (3.1-3.4)
Non-fatal MI	2,560	10.2 (9.8-10.6)	1,061	9.1 (8.6-9.7)	1,499	11.1 (10.5-11.7)	5,693	5.6 (5.4-5.7)	2,365	4.8 (4.6-5.0)	3,328	6.3 (6.1-6.5)

IR (incidence rate per 1,000 person-years)

* fatal and non-fatal events

Supplemental Table 4. Unadjusted and multivariable-adjusted hazard ratios for incident CVD comparing people with and without T2DM by sex, including the ratio of risks (RRR) between women and men showing the excess risk for incident CVD in women

Model	Adjustments		Primary Outcome: MACE		Secondary Outcome: MI (fatal/non-fatal)		Secondary Outcome: non-fatal MI		Secondary Outcome: Stroke (fatal/non-fatal)	
			Risk of CV associated with the presence of diabetes; **HR (95% CI)**	Ratio of risks between women and men; **RRR (95% CI)**	Risk of CV associated with the presence of diabetes; **HR (95% CI)**	Ratio of risks between women and men; **RRR (95% CI)**	Risk of CV associated with the presence of diabetes; **HR (95% CI)**	Ratio of risks between women and men; **RRR (95% CI)**	Risk of CV associated with the presence of diabetes; **HR (95% CI)**	Ratio of risks between women and men; **RRR (95% CI)**
1	Unadjusted	Women	1.44 (1.36-1.52)	**1.05 (0.98-1.13)**	1.68 (1.56-1.81)	**1.09 (0.99-1.20)**	1.82 (1.70-1.96)	**1.08 (0.98-1.18)**	1.24 (1.13-1.37)	**1.06 (0.92-1.22)**
		Men	1.37 (1.31-1.44)		1.54 (1.45-1.64)		1.69 (1.59-1.79)		1.17 (1.06-1.30)	
2	Calendar year, age, ethnicity, deprivation, general practice	Women	1.36 (1.29-1.44)	**1.08 (1.00-1.16)**	1.55 (1.44-1.67)	**1.12 (1.01-1.23)**	1.66 (1.55-1.79)	**1.09 (0.99-1.20)**	1.18 (1.07-1.30)	**1.04 (0.93-1.18)**
		Men	1.26 (1.20-1.33)		1.39 (1.30-1.48)		1.52 (1.43-1.61)		1.13 (1.05-1.21)	
3	Model 2 plus baseline smoking, obesity, hypertension, hypercholesterolaemia, and CCI	Women	1.23 (1.16-1.32)	**1.05 (0.97-1.14)**	1.35 (1.24-1.48)	**1.07 (0.95-1.20)**	1.45 (1.34-1.58)	**1.05 (0.94-1.17)**	1.15 (1.03-1.28)	**1.06 (0.93-1.22)**
		Men	1.17 (1.11-1.23)		1.26 (1.17-1.36)		1.38 (1.29-1.48)		1.08 (1.00-1.17)	
4	Model 3 plus time-varying smoking, obesity, hypertension, hypercholesterolaemia and raised HbA1c	Women	1.20 (1.12-1.28)	**1.07 (0.98-1.17)**	1.31 (1.20-1.43)	**1.09 (0.98-1.22)**	1.40 (1.29-1.53)	**1.06 (0.95-1.18)**	1.13 (1.01-1.26)	**1.09 (0.93-1.28)**
		Men	1.12 (1.06-1.19)		1.20 (1.12-1.28)		1.32 (1.23-1.41)		1.04 (0.92-1.16)	

Ratio of relative risks (RRR) greater than 1 indicates an excess risk for incident cardiovascular disease in women who developed diabetes compared to men who developed diabetes

Supplemental Table 5. Unadjusted and multivariable-adjusted hazard ratios for incident CVD comparing people with and without T2DM by sex, including the ratio of risks (RRR) between women and men showing the excess risk for incident CVD in women stratified by year of diagnosis (2007-2010)

Model	Adjustments		Primary Outcome: MACE		Secondary Outcome: MI (fatal/non-fatal)		Secondary Outcome: Stroke (fatal/non-fatal)	
			Risk of CV associated with the presence of diabetes; **HR (95% CI)**	Ratio of risks between women and men; **RRR (95% CI)**	Risk of CV associated with the presence of diabetes; **HR (95% CI)**	Ratio of risks between women and men; **RRR (95% CI)**	Risk of CV associated with the presence of diabetes; **HR (95% CI)**	Ratio of risks between women and men; **RRR (95% CI)**
1	Unadjusted	Women	1.46 (1.36-1.58)	**1.07 (0.96-1.18)**	1.77 (1.60-1.96)	**1.17 (1.03-1.34)**	1.20 (1.05-1.37)	**0.96 (0.80-1.16)**
		Men	1.37 (1.28-1.47)		1.51 (1.39-1.65)		1.25 (1.10-1.43)	
2	Calendar year, age, ethnicity, deprivation, general practice	Women	1.38 (1.28-1.48)	**1.10 (0.99-1.21)**	1.64 (1.48-1.82)	**1.22 (1.07-1.40)**	1.12 (0.98-1.28)	**0.97 (0.80-1.17)**
		Men	1.26 (1.18-1.35)		1.34 (1.23-1.47)		1.16 (1.02-1.33)	
3	Model 2 plus baseline smoking, obesity, hypertension, hypercholesterolaemia, and CCI	Women	1.26 (1.16-1.38)	**1.08 (0.96-1.21)**	1.44 (1.28-1.62)	**1.16 (0.99-1.36)**	1.12 (0.96-1.30)	**1.01 (0.82-1.25)**
		Men	1.17 (1.08-1.27)		1.24 (1.12-1.38)		1.11 (0.96-1.29)	
4	Model 3 plus time-varying smoking, obesity, hypertension, hypercholesterolaemia and raised HbA1c	Women	1.22 (1.12-1.33)	**1.09 (0.97-1.22)**	1.39 (1.24-1.57)	**1.19 (1.01-1.39)**	1.09 (0.94-1.27)	**1.00 (0.82-1.23)**
		Men	1.12 (1.04-1.20)		1.17 (1.05-1.30)		1.09 (0.95-1.25)	

Ratio of relative risks (RRR) greater than 1 indicates an excess risk for incident cardiovascular disease in women who developed diabetes compared to men who developed diabetes

Supplemental Table 6. Unadjusted and multivariable-adjusted hazard ratios for incident CVD comparing people with and without T2DM by sex, including the ratio of risks (RRR) between women and men showing the excess risk for incident CVD in women stratified by year of diagnosis (2011-2013)

Model	Adjustments		Primary Outcome: MACE		Secondary Outcome: MI (fatal/non-fatal)		Secondary Outcome: Stroke (fatal/non-fatal)	
			Risk of CV associated with the presence of diabetes; **HR (95% CI)**	Ratio of risks between women and men; **RRR (95% CI)**	Risk of CV associated with the presence of diabetes; **HR (95% CI)**	Ratio of risks between women and men; **RRR (95% CI)**	Risk of CV associated with the presence of diabetes; **HR (95% CI)**	Ratio of risks between women and men; **RRR (95% CI)**
1	Unadjusted	Women	1.52 (1.32-1.75)	**0.95 (0.79-1.14)**	1.67 (1.37-2.03)	**0.94 (0.73-1.20)**	1.61 (1.28-2.02)	**1.29 (0.93-1.79)**
		Men	1.60 (1.42-1.80)		1.78 (1.53-2.07)		1.25 (0.99-1.58)	
2	Calendar year, age, ethnicity, deprivation, general practice	Women	1.45 (1.25-1.67)	**1.00 (0.83-1.21)**	1.52 (1.24-1.86)	**0.97 (0.75-1.26)**	1.60 (1.27-2.03)	**1.36 (0.97-1.90)**
		Men	1.45 (1.28-1.64)		1.56 (1.33-1.82)		1.18 (0.93-1.50)	
3	Model 2 plus baseline smoking, obesity, hypertension, hypercholesterolaemia, and CCI	Women	1.31 (1.11-1.53)	**0.94 (0.76-1.17)**	1.38 (1.10-1.72)	**0.97 (0.72-1.31)**	1.43 (1.11-1.85)	**1.15 (0.79-1.69)**
		Men	1.39 (1.20-1.60)		1.42 (1.17-1.72)		1.24 (0.93-1.64)	
4	Model 3 plus time-varying smoking, obesity, hypertension, hypercholesterolaemia and raised HbA1c	Women	1.27 (1.07-1.49)	**0.94 (0.75-1.18)**	1.33 (1.04-1.68)	**0.98 (0.72-1.33)**	1.41 (1.07-1.84)	**1.13 (0.74-1.72)**
		Men	1.35 (1.16-1.58)		1.36 (1.12-1.66)		1.25 (0.90-1.73)	

Ratio of relative risks (RRR) greater than 1 indicates an excess risk for incident cardiovascular disease in women who developed diabetes compared to men who developed diabetes

Supplemental Table 7. Unadjusted and multivariable-adjusted hazard ratios for incident MACE events comparing people with and without T2DM by sex and age of onset of T2DM

Model	Adjustments		Primary Outcome: MACE							
			<50 years **T2DM: N=14,049** **Controls: N=69,416**		**50-60 years** **T2DM: N=15,587** **Controls: N=73,962**		**60-70 years** **T2DM: N=17,190** **Controls: N=74,652**		**≥70 years** **T2DM: N=16,892** **Controls: N=59,146**	
			Risk of CV associated with the presence of diabetes; **HR (95% CI)**	Ratio of risks between women and men; **RRR (95% CI)**	Risk of CV associated with the presence of diabetes; **HR (95% CI)**	Ratio of risks between women and men; **RRR (95% CI)**	Risk of CV associated with the presence of diabetes; **HR (95% CI)**	Ratio of risks between women and men; **RRR (95% CI)**	Risk of CV associated with the presence of diabetes; **HR (95% CI)**	Ratio of risks between women and men; **RRR (95% CI)**
1	Unadjusted	Women	3.73 (2.92-4.78)	1.39 (1.03-1.87)	2.10 (1.78-2.48)	1.21 (1.00-1.48)	1.74 (1.55-1.94)	1.39 (1.21-1.60)	1.19 (1.11-1.28)	1.04 (0.94-1.16)
		Men	2.69 (2.28-3.18)		1.73 (1.56-1.93)		1.25 (1.15-1.37)		1.14 (1.05-1.23)	
2	Calendar year, ethnicity, deprivation, general practice	Women	3.33 (2.56-4.31)	1.41 (1.03-1.93)	2.03 (1.70-2.42)	1.33 (1.08-1.63)	1.57 (1.40-1.76)	1.38 (1.19-1.59)	1.14 (1.06-1.23)	1.05 (0.94-1.17)
		Men	2.36 (1.98-2.80)		1.53 (1.37-1.71)		1.14 (1.04-1.25)		1.09 (1.01-1.19)	
3	Model 2 plus baseline smoking, obesity, hypertension, hypercholesterolaemia and CCI	Women	3.02 (2.11-4.34)	1.31 (0.87-1.99)	1.69 (1.36-2.10)	1.22 (0.95-1.57)	1.41 (1.24-1.60)	1.34 (1.14-1.58)	1.06 (0.98-1.15)	1.05 (0.93-1.19)
		Men	2.30 (1.87-2.82)		1.38 (1.22-1.57)		1.05 (0.95-1.16)		1.01 (0.92-1.11)	
4	Model 3 plus time-varying smoking, obesity, hypertension, hypercholesterolaemia and raised HbA1c	Women	2.83 (1.86-4.30)	1.30 (0.80-2.09)	1.67 (1.35-2.08)	1.26 (0.98-1.61)	1.38 (1.22-1.56)	1.35 (1.15-1.60)	1.04 (0.95-1.12)	1.04 (0.92-1.18)
		Men	2.18 (1.73-2.74)		1.33 (1.17-1.51)		1.02 (0.89-1.11)		1.00 (0.90-1.08)	

Ratio of relative risks (RRR) greater than 1 indicates an excess risk for incident cardiovascular disease in women who developed diabetes compared to men who developed diabetes

Supplemental Table 8. Comparisons between women and men of the proportion and rate of risk factor checks, risk factor levels, interventions, and prescriptions from the diagnosis of T2DM up to 7 years after diagnosis

Risk factor checks, levels, interventions and prescriptions	Year 1		Years 2-3		Years 4-5		Years 6-7	
	Women	Men	Women	Men	Women	Men	Women	Men
n (%)	35,396 (44.3)	44,589 (55.8)	24,957 (44.3)	31,352 (55.7)	14,996 (44.6)	18,667 (55.5)	7,614 (45.1)	9,257 (54.9)
No. of consultations/person/year								
Face-to-face interactions	15	13	10	7	10	8	10	8
Telephone interactions	1.1	0.8	0.7	0.5	0.8	0.6	0.8	0.6
No. of risk factor checks/person/year								
HbA1c tests	2.09	2.04	1.32	1.26	1.28	1.24	1.28	1.24
Blood pressure checks	3.49	3.32	2.04	1.82	1.92	1.77	1.82	1.70
Lipids checks	1.75	1.80	1.01	0.99	0.96	0.96	0.92	0.94
BMI measured	2.67	2.37	1.44	1.21	1.33	1.18	1.25	1.14
Smoking cessation discussed	0.50	0.52	0.32	0.31	0.31	0.32	0.29	0.32
Risk factors levels								
HbA1c >7% (53mmol/mol), %	54.1	57.9	46.5	50.3	49.3	52.8	48.6	51.6
HbA1c >8% (64mmol/mol), %	30.0	35.8	22.5	26.0	25.6	28.7	26.6	29.0
Blood pressure >140/80, %	53.8	53.5	44.0	43.2	37.9	37.2	30.0	29.3
On BP medication	79.8	76.7	84.5	83.4	86.5	85.7	88.9	87.6
Blood pressure >130/80, %	67.7	66.7	59.5	58.6	54.6	53.9	47.0	46.0
On BP medication	78.2	75.1	82.7	81.4	84.7	83.3	87.3	85.6
Blood pressure >130/80 and end organ damage, %	25.0	15.8	26.9	19.4	27.2	20.6	26.1	19.4
On BP medication	90.7	90.4	90.9	89.6	90.8	89.4	92.1	90.4
Cholesterol >target (LDL>2 or TC>4), %	55.6	48.5	45.7	36.0	38.1	28.8	29.8	21.5
On lipid-lowering medication	70.0	69.8	76.0	74.8	75.6	76.9	76.3	77.6
Obese, %	57.0	54.1	50.5	46.8	48.0	44.3	42.4	40.0
Current smoking, %	13.9	15.5	11.8	12.9	10.8	11.6	9.1	10.3

Risk factor checks, levels, interventions and prescriptions	Year 1		Years 2-3		Years 4-5		Years 6-7	
	Women	Men	Women	Men	Women	Men	Women	Men
n (%)	35,396 (44.3)	44,589 (55.8)	24,957 (44.3)	31,352 (55.7)	14,996 (44.6)	18,667 (55.5)	7,614 (45.1)	9,257 (54.9)
Interventions								
Diet intervention offered, %	59.7	60.0	51.0	50.6	53.8	54.9	64.5	63.2
Exercise intervention offered, %	43.1	44.	39.0	39.1	37.5	38.0	33.4	33.2
Structured education offered, %	16.6	17.0	3.1	3.3	4.0	4.5	5.7	6.8
Bariatric surgery, %	0.14	0.03	0.21	0.09	0.12	0.06	0.17	0.04
Drug Prescriptions								
Diabetes								
Any oral hypoglycaemic agent, %	57.7	59.0	67.9	70.4	72.8	75.9	76.0	79.1
Metformin, %	52.2	53.5	60.7	64.2	64.0	68.7	66.1	71.2
Sulphonylurea, %	13.7	14.3	20.6	23.0	26.0	29.2	28.9	33.2
Glitazone, %	2.1	2.0	3.9	4.3	4.8	5.5	5.0	6.1
DPP4i, %	1.6	1.5	6.9	6.9	10.8	11.6	13.6	15.3
SGLT2i, %	0.1	0.1	0.4	0.4	0.9	0.9	1.9	1.9
GLP-1 agonist, %	0.3	0.2	2.0	1.5	3.5	2.7	4.2	3.5
Meglitinide, %	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.3
Insulin, %	4.4	4.2	5.5	4.8	7.5	6.4	9.9	9.1
Combination, %	0.6	0.8	1.1	1.5	1.2	1.8	1.2	1.7
Antihypertensive agent								
Any, %	69.4	66.7	72.3	71.0	74.5	73.8	76.4	75.7
Alpha-blocker, %	5.3	6.4	6.4	7.9	6.9	8.5	7.4	8.9
Angiotensin II receptor blocker, %	15.0	11.7	17.8	14.4	19.5	15.5	20.4	16.4
ACE inhibitor, %	37.1	42.9	39.7	47.1	40.6	49.2	41.8	50.1
Beta-blocker, %	21.8	23.1	20.6	22.0	20.5	21.8	20.7	21.5
Calcium channel blocker, %	28.4	28.8	30.5	31.9	31.7	33.3	33.0	34.8
Diuretic: thiazide, potassium sparing or loop, %	36.9	24.8	34.3	23.9	34.7	24.6	34.0	24.4
Lipid lowering therapy								
Any, %	66.5	70.4	73.8	75.9	75.2	78.2	76.3	79.5
Statin, %	65.2	69.1	71.8	74.5	73.0	76.4	73.7	77.5
Fibrate, %	1.2	1.6	1.7	2.0	1.7	2.2	1.9	2.3
Ezetimibe, %	4.1	3.6	4.8	4.0	5.2	4.3	5.7	4.4
Other, %	2.7	2.9	3.9	3.5	3.7	3.4	3.6	3.0

Risk factor checks, levels, interventions and prescriptions	Year 1		Years 2-3		Years 4-5		Years 6-7	
	Women	Men	Women	Men	Women	Men	Women	Men
n (%)	35,396 (44.3)	44,589 (55.8)	24,957 (44.3)	31,352 (55.7)	14,996 (44.6)	18,667 (55.5)	7,614 (45.1)	9,257 (54.9)
Antiplatelets								
Any, %	30.5	36.2	30.3	36.3	29.0	35.6	28.8	35.9
Aspirin, %	28.8	34.4	28.6	34.4	27.2	33.6	26.6	33.7
Clopidogrel, %	3.6	4.9	3.0	4.2	3.1	4.0	3.6	3.9

Data presented as %,or age-adjusted rate, as indicated

% missing data for risk factor levels;
HbA1c: Baseline 4.2% (women 4.3%, men 4.1%), Years 2-3 11.5% (women 11.3%, men 11.6%); Years 4-5 13.9% (women 14.1%, men 13.7%); Years 6-7 18.8% (women 18.7%, men 18.9%)
Blood Pressure: Baseline 2.3% (women 2.3%, men 2.2%), Years 2-3 9.7% (women 9.2%, men 10.1%); Years 4-5 12.1% (women 11.9%, men 12.3%); Years 6-7 16.9% (women 16.2%, men 17.4%)
Cholesterol: Baseline 4.6% (women 5.1%, men 4.1%), Years 2-3 13.2% (women 13.0%, men 13.4%); Years 4-5 16.0% (women 16.2%, men 15.9%); Years 6-7 22.0% (women 22.0%, men 22.1%)
Obesity: Baseline 6.9% (women 7.7%, men 6.3%), Years 2-3 15.1% (women 15.3%, men 14.9%); Years 4-5 17.9% (women 18.2%, men 17.5%); Years 6-7 24.4% (women 24.8%, men 24.1%)

Supplemental Table 9. Comparisons between women and men of risk factor checks, risk factor levels, interventions, and prescriptions from the diagnosis of T2DM to 7 years after diagnosis – analysis stratified by CVD status (with CVD from baseline and through follow-up)

Risk factor checks, levels, interventions and prescriptions	Year 1		Years 2-3		Years 4-5		Years 6-7	
	Women N=35,396	Men N=44,589	Women N=24,957	Men N=31,352	Women N=14,996	Men N=18,667	Women N=7,614	Men N=9,257
n (%)	6,587 (18.6)	10,897 (24.4)	3,939 (15.8)	6,871 (21.9)	2,115 (14.1)	3,723 (19.9)	945 (12.4)	1,657 (17.9)
No. of consultations/person/year								
Face-to-face interactions	21	15	14	8	12	9	13	9
Telephone interactions	2.1	0.8	1.7	0.5	0.7	0.6	0.6	0.6
No. of risk factor checks/person/year								
HbA1c tests	2.06	1.96	1.47	1.13	1.23	1.16	1.40	1.22
Blood pressure checks	4.15	3.67	2.51	2.14	2.20	2.46	2.55	1.91
Lipids checks	2.05	1.79	1.26	1.01	0.99	0.94	0.98	0.97
BMI measured	2.83	2.37	1.46	1.28	1.35	1.17	0.28	1.01
Smoking cessation discussed	0.83	0.77	0.86	0.31	0.35	0.29	0.58	0.28
Risk factors levels								
HbA1c >7% (53mmol/mol), %	49.4	52.0	41.7	46.8	44.4	47.4	45.1	47.0
HbA1c >8% (64mmol/mol), %	23.9	26.5	18.7	21.3	21.4	23.4	23.5	23.4
Blood pressure >140/80, %	47.8	45.3	42.9	40.0	37.5	34.0	32.6	28.3
On BP medication	94.7	93.3	95.2	95.3	93.8	95.7	96.4	95.5
Blood pressure >130/80, %	64.1	62.3	58.6	57.5	54.7	52.2	50.3	47.1
On BP medication	94.3	92.8	94.9	94.2	93.3	94.5	95.8	94.2
Cholesterol >target (LDL>2 or TC>4), %	43.3	35.8	39.8	30.9	32.4	24.5	26.4	19.5
On lipid-lowering medication	84.6	88.3	86.7	89.0	84.4	87.9	79.1	87.9
Obese, %	47.3	49.4	41.1	43.6	39.5	39.5	35.8	36.8
Current smoking, %	13.1	13.7	12.1	12.1	10.5	11.8	9.6	10.7

Risk factor checks, levels, interventions and prescriptions	Year 1		Years 2-3		Years 4-5		Years 6-7	
	Women N=35,396	Men N=44,589	Women N=24,957	Men N=31,352	Women N=14,996	Men N=18,667	Women N=7,614	Men N=9,257
n (%)	6,587 (18.6)	10,897 (24.4)	3,939 (15.8)	6,871 (21.9)	2,115 (14.1)	3,723 (19.9)	945 (12.4)	1,657 (17.9)
Interventions								
Diet intervention offered, %	55.8	59.4	47.9	50.7	49.7	54.0	61.7	62.7
Exercise intervention offered, %	41.5	46.7	37.7	41.0	37.3	39.6	33.4	35.1
Structured education offered, %	13.9	16.0	2.6	2.6	2.7	3.8	4.4	6.0
Bariatric surgery, %	0.05	0.00	0.03	0.07	0.00	0.00	0.11	0.06
Drug Prescriptions								
Diabetes								
Any oral hyoglycaemic agent, %	53.4	55.8	61.1	66.5	65.9	72.0	70.6	75.9
Metformin, %	44.6	47.9	50.8	58.1	53.7	61.8	57.9	65.0
Sulphonylurea, %	15.4	14.9	20.8	21.7	25.8	27.8	26.9	31.7
Glitazone, %	2.0	1.5	3.1	3.1	3.6	3.7	3.8	4.2
DPP4i, %	1.3	1.1	4.7	5.4	7.6	9.7	9.8	13.8
SGLT2i, %	0.1	0.1	0.2	0.2	0.4	0.6	0.4	0.8
GLP-1 agonist, %	0.2	0.2	1.0	1.2	1.6	2.0	1.9	3.0
Meglitinide, %	0.2	0.2	0.3	0.4	0.2	0.3	0.3	0.3
Insulin, %	5.4	5.4	6.0	5.4	8.0	7.0	11.2	9.0
Combination, %	0.5	0.6	0.8	1.1	0.6	1.2	0.2	1.2
Antihypertensive agent								
Any, %	90.9	91.0	90.2	90.1	89.5	90.4	91.4	90.0
Alpha-blocker, %	7.4	8.3	8.7	9.9	9.0	10.0	8.0	10.3
Angiotensin II receptor blocker, %	20.9	16.4	22.8	17.7	22.9	18.1	25.2	19.0
ACE inhibitor, %	47.1	57.6	49.0	58.3	47.2	59.5	47.6	58.4
Beta-blocker, %	43.1	52.3	42.3	50.5	41.8	48.7	43.5	48.6
Calcium channel blocker, %	40.1	37.8	41.8	39.8	40.9	39.8	43.8	41.3
Diuretic: thiazide, potassium sparing or loop, %	54.7	39.0	50.8	37.1	51.2	37.3	49.0	36.6

Risk factor checks, levels, interventions and prescriptions	Year 1		Years 2-3		Years 4-5		Years 6-7	
	Women N=35,396	Men N=44,589	Women N=24,957	Men N=31,352	Women N=14,996	Men N=18,667	Women N=7,614	Men N=9,257
n (%)	6,587 (18.6)	10,897 (24.4)	3,939 (15.8)	6,871 (21.9)	2,115 (14.1)	3,723 (19.9)	945 (12.4)	1,657 (17.9)
Lipid lowering therapy								
Any, %	83.5	89.6	83.7	88.6	82.4	87.9	82.8	88.1
Statin, %	81.5	88.0	81.0	86.9	79.8	85.9	79.3	86.1
Fibrate, %	1.8	2.2	2.4	2.6	2.4	2.8	3.2	2.8
Ezetimibe, %	7.0	6.4	8.0	6.8	8.2	6.5	9.2	6.6
Other, %	5.3	6.5	6.6	6.1	5.7	5.5	5.8	5.0
Antiplatelets								
Any, %	69.6	75.4	66.7	74.1	65.8	73.1	65.6	72.4
Aspirin, %	62.8	69.6	60.3	68.3	58.6	66.8	57.4	65.7
Clopidogrel, %	15.4	17.5	12.8	14.7	14.0	14.3	14.6	13.3

Data presented as %,or age-adjusted rate, as indicated

Supplemental Table 10. Comparisons between women and men of risk factor checks, risk factor levels, interventions, and prescriptions from the diagnosis of T2DM to 7 years after diagnosis – analysis stratified by CVD status (without CVD from baseline and through follow-up)

Risk factor checks, levels, interventions and prescriptions	Year 1		Years 2-3		Years 4-5		Years 6-7	
	Women N=35,396	Men N=44,589	Women N=24,957	Men N=31,352	Women N=14,996	Men N=18,667	Women N=7,614	Men N=9,257
n (%)	28,809 (81.4)	33,692 (75.6)	21,018 (84.2)	24,481 (78.1)	12,881 (85.9)	14,944 (80.1)	6,669 (87.6)	7,600 (82.1)
No. of consultations/person/year								
Face-to-face interactions	15	13	10	8	10	8	10	8
Telephone interactions	1.0	0.7	0.7	0.5	0.7	0.6	0.8	0.5
No. of risk factor checks/person/year								
HbA1c tests	2.07	2.01	1.30	1.24	1.27	1.23	1.26	1.22
Blood pressure checks	3.42	3.24	2.00	1.76	1.88	1.71	1.78	1.65
Lipids checks	1.73	1.77	0.99	0.97	0.95	0.94	0.91	0.93
BMI measured	2.65	2.34	1.43	1.19	1.32	1.15	1.25	1.12
Smoking cessation discussed	0.48	0.49	0.31	0.29	0.30	0.31	0.28	0.31
Risk factors levels								
HbA1c >7% (53mmol/mol), %	55.1	59.8	47.4	51.2	50.1	54.1	49.1	52.6
HbA1c >8% (64mmol/mol), %	31.4	38.8	23.2	27.4	26.3	30.1	27.0	30.2
Blood pressure >140/80, %	55.1	56.1	44.2	44.2	38.0	38.0	29.7	29.5
On BP medication	76.9	72.4	82.6	80.3	85.3	83.5	87.7	86.0
Blood pressure >130/80, %	68.5	68.1	59.7	59.0	54.6	54.4	46.6	45.8
On BP medication	74.7	69.8	80.5	77.9	83.3	80.7	86.0	83.7
Cholesterol >target (LDL>2 or TC>4), %	58.4	52.5	46.8	37.4	39.1	29.9	30.3	22.0
On lipid-lowering medication	67.5	65.8	74.2	71.6	74.4	74.6	76.0	75.5
Obese, %	59.2	55.6	52.2	47.8	49.4	45.5	43.4	40.7
Current smoking, %	14.1	16.1	11.8	13.2	10.9	11.6	9.0	10.3

Risk factor checks, levels, interventions and prescriptions	Year 1		Years 2-3		Years 4-5		Years 6-7	
	Women N=35,396	Men N=44,589	Women N=24,957	Men N=31,352	Women N=14,996	Men N=18,667	Women N=7,614	Men N=9,257
n (%)	28,809 (81.4)	33,692 (75.6)	21,018 (84.2)	24,481 (78.1)	12,881 (85.9)	14,944 (80.1)	6,669 (87.6)	7,600 (82.1)
Interventions								
Diet intervention offered, %	60.5	60.1	51.6	50.6	54.5	55.1	64.9	63.3
Exercise intervention offered, %	43.4	43.2	39.2	38.6	37.5	37.6	33.3	32.8
Structured education offered, %	17.2	17.3	3.2	3.5	4.2	4.7	5.9	7.0
Bariatric surgery, %	0.16	0.04	0.24	0.09	0.14	0.07	0.18	0.04
Drug Prescriptions								
Diabetes								
Any oral hyoglycaemic agent, %	58.7	60.1	69.2	71.5	74.0	76.9	76.7	79.8
Metformin, %	54.0	55.3	62.6	65.9	65.7	70.4	67.3	72.5
Sulphonylurea, %	13.3	14.1	20.5	23.4	26.0	29.6	29.2	33.5
Glitazone, %	2.1	2.2	4.0	4.6	5.0	5.9	5.1	6.6
DPP4i, %	1.6	1.7	7.3	7.3	11.3	12.0	14.1	15.7
SGLT2i, %	0.1	0.1	0.5	0.5	1.0	1.0	2.1	2.1
GLP-1 agonist, %	0.4	0.2	2.2	1.6	3.8	2.9	4.5	3.6
Meglitinide, %	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.3
Insulin, %	4.1	3.8	5.4	4.6	7.4	6.3	9.7	9.1
Combination, %	0.7	0.9	1.2	1.6	1.3	1.9	1.4	1.8
Antihypertensive agent								
Any, %	64.5	58.8	68.9	65.7	72.0	69.7	74.2	72.5
Alpha-blocker, %	4.8	5.8	6.0	7.3	6.6	8.1	7.3	8.6
Angiotensin II receptor blocker, %	13.7	10.2	16.9	13.5	18.9	14.9	19.7	15.9
ACE inhibitor, %	34.8	38.2	37.9	44.0	39.5	46.7	41.0	48.3
Beta-blocker, %	16.9	13.6	16.5	14.0	17.0	15.0	17.5	15.6
Calcium channel blocker, %	25.7	25.9	28.4	29.7	30.3	31.6	31.4	33.4
Diuretic: thiazide, potassium sparing or loop, %	32.8	20.2	31.2	20.2	32.0	21.4	31.9	21.7

Risk factor checks, levels, interventions and prescriptions	Year 1		Years 2-3		Years 4-5		Years 6-7	
	Women N=35,396	Men N=44,589	Women N=24,957	Men N=31,352	Women N=14,996	Men N=18,667	Women N=7,614	Men N=9,257
n (%)	28,809 (81.4)	33,692 (75.6)	21,018 (84.2)	24,481 (78.1)	12,881 (85.9)	14,944 (80.1)	6,669 (87.6)	7,600 (82.1)
Lipid lowering therapy								
Any, %	62.6	64.1	72.0	72.4	74.0	75.8	75.3	77.6
Statin, %	61.5	63.0	70.1	71.0	71.9	74.1	72.9	75.6
Fibrate, %	1.0	1.4	1.5	1.8	1.6	2.0	1.7	2.1
Ezetimibe, %	3.4	2.7	4.2	3.2	4.7	3.7	5.2	4.0
Other, %	2.0	1.8	3.4	2.8	3.4	2.9	3.3	2.5
Antiplatelets								
Any, %	21.6	23.6	23.5	25.6	22.9	26.2	23.6	28.0
Aspirin, %	21.0	23.1	22.7	24.9	22.0	25.3	22.2	26.8
Clopidogrel, %	0.9	0.8	1.2	1.2	1.3	1.4	2.0	1.8

Data presented as %,or age-adjusted rate, as indicated

Supplemental Table 11. Comparison of the proportions of women and men meeting minimum standards of care over 7 years of follow-up years from diagnosis of diabetes

Minimum Standard of Care Indicator Assessed in the Previous 15 Months		Years 2-3			Years 4-5			Years 6-7		
		Women N=13,917	Men N=17,304	OR (95% CI)	Women N=6,839	Men N=8,257	OR† (95% CI)	Women N=1,959	Men N=2,252	OR (95% CI)
1	BMI recorded	91.6	91.8	0.98 (0.90-1.06)	91.6	91.7	0.98 (0.87-1.10)	89.8	91.7	0.80 (0.65-0.99)
2	HbA1c recorded	94.8	94.7	1.02 (0.92-1.13)	94.8	94.9	0.98 (0.85-1.14)	95.0	95.7	0.84 (0.63-1.12)
3	Blood pressure recorded	96.5	95.9	1.15 (1.03-1.30)	96.3	95.8	1.15 (0.97-1.35)	95.1	96.0	0.81 (0.60-1.08)
4	Microalbuminuria tested	45.5	48.8	0.88 (0.84-0.92)	53.3	56.5	0.88 (0.82-0.94)	64.7	69.1	0.82 (0.72-0.93)
5	Treated with ACE inhibitors if proteinuria or microalbuminuria	51.4	59.0	0.74 (0.64-0.84)	51.3	62.0	0.65 (0.54-0.77)	54.8	62.7	0.72 (0.54-0.96)
6	Last measured TC ≤5 mmol/l	66.3	76.3	0.61 (0.58-0.64)	67.9	78.4	0.58 (0.54-0.63)	71.8	81.4	0.58 (0.50-0.67)
6a	in those with prevalent CVD	72.7	84.4	0.49 (0.42-0.57)	76.5	84.3	0.61 (0.48-0.77)	78.8	86.6	0.57 (0.35-0.93)
6b	in those without prevalent CVD	65.5	74.6	0.65 (0.61-0.68)	67.0	77.3	0.60 (0.55-0.64)	71.2	80.6	0.60 (0.61-0.69)
7	eGFR or serum creatinine testing	95.6	94.8	1.20 (1.08-1.33)	95.2	95.0	1.04 (0.89-1.20)	95.0	95.7	0.85 (0.64-1.14)
8	Last IFCC-HbA1c ≤59 mmol/mol (≤7.5%)	74.1	71.1	1.16 (1.11-1.22)	69.0	67.0	1.10 (1.02-1.17)	66.3	62.9	1.16 (1.02-1.32)
9	Last blood pressure ≤140/80mmHg	58.2	56.1	1.09 (1.04-1.14)	61.2	59.2	1.09 (1.02-1.16)	67.3	65.5	1.09 (0.96-1.24)
9a	in those with prevalent CVD	62.0	66.6	0.82 (0.72-0.93)	65.4	65.4	1.00 (0.82-1.22)	67.7	66.3	1.06 (0.72-1.58)
9b	in those without prevalent CVD	57.7	54.0	1.16 (1.11-1.22)	60.7	58.1	1.12 (1.04-1.20)	67.3	65.3	1.09 (0.95-1.25)

Data presented as %; OR, odds ratio (values significantly <1 indicate lower standards of care in women compared to men). Indicators assessed during first 15 months of time block

Supplemental Table 12. Comparison of the proportion of women and men receiving treatments over 7 years of follow-up years from diagnosis of diabetes, stratified by age and cardiovascular disease

Drug treatment in the Previous 15 Months	Years 2-3			Years 4-5			Years 6-7		
	Women N=13,917	Men N=17,304	OR (95% CI)	Women N=6,839	Men N=8,257	OR (95% CI)	Women N=1,959	Men N=2,252	OR (95% CI)
Treated with ACE inhibitors if proteinuria or microalbuminuria									
a <50	46.9	55.7	0.70 (0.48-1.03)	50.7	52.3	0.94 (0.53-1.66)	33.3	59.4	0.34 (0.11-1.08)
b ≥50	52.1	59.5	0.74 (0.64-0.86)	51.4	63.0	0.62 (0.52-0.74)	56.4	62.9	0.76 (0.57-1.02)
Treated with statins	74.3	76.6	0.88 (0.84-0.93)	76.0	79.4	0.82 (0.76-0.89)	78.7	81.7	0.83 (0.71-0.96)
a <50 *with prevalent CVD*	75.9	88.8	0.40 (0.14-1.14)	71.4	87.1	0.37 (0.05-2.60)	-	100.0	-
<50 *without prevalent CVD*	55.5	64.8	0.68 (0.60-0.76)	58.5	68.6	0.64 (0.53-0.78)	62.1	69.7	0.71 (0.46-1.10)
b ≥50 *with prevalent CVD*	84.3	89.7	0.61 (0.51-0.74)	83.6	90.1	0.56 (0.43-0.74)	85.3	90.7	0.59 (0.34-1.04)
≥50 *without prevalent CVD*	76.3	75.9	1.02 (0.96-1.09)	77.7	79.0	0.93 (0.85-1.02)	79.7	81.3	0.90 (0.76-1.07)

Data presented as %; OR, odds ratio (values significantly <1 indicate lower standards of care in women compared to men). Indicators assessed during first 15 months of time block

Supplemental Table 13. Comparison between men and women with type 2 diabetes for the time to intensification of drug regimens after risk factor levels exceed specified thresholds along with the probability of treatment intensification stratified by the number of medications prescribed for each risk factor and the presence of end organ damage

Therapy and Cut-off value	Number of drugs at baseline	Months to treatment intensification in those with treatment modifications			Probability of treatment intensification over 7 years from diagnosis		
		Women	Men	P-value	Women	Men	P-value
Diabetes therapies							
HbA1c >7% (53mmol/mol)							
n=33,050	0	4.3	4.4	0.371	98.2	99.0	0.206
n=19,965	1	12.1	11.9	0.679	83.7	84.4	0.982
n=3,271	2+	12.7	14.5	0.163	59.4	58.8	0.118
HbA1c >8% (64mmol/mol)							
n=18,927	0	2.4	2.6	0.002	99.3	99.4	0.061
n=14,366	1	10.2	10.3	0.726	88.0	87.1	0.075
n=3,095	2+	10.9	12.9	0.055	60.0	63.6	0.085
Antihypertensive therapies							
BP >130/80							
n=22,373	0	5.5	6.4	0.003	82.8	77.6	0.989
n=10,631	1	7.4	9.2	0.008	75.4	69.3	0.882
n=11,561	2+	8.6	9.9	0.186	23.8	30.5	0.139
BP >130/80 and target organ damage							
n=4,376	0	3.1	4.0	0.019	65.4	76.7	0.544
n=4,846	1	5.4	5.6	0.769	49.6	51.1	0.816
n=9,199	2+	5.4	7.9	0.011	21.6	40.9	0.017
BP >140/80							
n=20,652	0	4.4	5.8	<0.001	83.4	81.9	0.021
n=13,367	1	6.7	8.5	<0.001	75.8	71.4	0.801
n=17,883	2+	7.3	9.6	0.001	25.2	33.9	0.068
Lipid-lowering therapies							
LDL >2 or TC>4 and CVD							
n=3,797	0	5.0	4.6	0.238	71.5	81.7	<0.001
n=7,918	1	12.1	10.6	0.415	6.0	6.9	0.819
n=502	2+	8.3	8.8	0.908	5.3	6.4	0.689
LDL >2 or TC>4, no CVD							
n=39,086	0	8.5	8.4	0.509	80.3	82.9	0.976
n=18,464	1	20.4	17.2	0.066	5.9	5.9	0.419
n=507	2+	12.1	11.5	0.908	7.2	4.7	0.394

Supplemental Table 14. Comparison of unadjusted hazard ratios for MACE events in incident T2DM and prevalent T2DM patients

Model	Diabetes cohort		Primary Outcome: MACE		Secondary Outcome: MI (fatal/non-fatal)		Secondary Outcome: Stroke (fatal/non-fatal)	
			Risk of CV associated with the presence of diabetes; **HR (95% CI)**	Ratio of risks between women and men; **RRR (95% CI)**	Risk of CV associated with the presence of diabetes; **HR (95% CI)**	Ratio of risks between women and men; **RRR (95% CI)**	Risk of CV associated with the presence of diabetes; **HR (95% CI)**	Ratio of risks between women and men; **RRR (95% CI)**
1	**Incident T2DM ***	Women	1.44 (1.36-1.52)	**1.05 (0.98-1.13)**	1.68 (1.56-1.81)	**1.09 (0.99-1.20)**	1.24 (1.13-1.37)	**1.06 (0.92-1.22)**
		Men	1.37 (1.31-1.44)		1.54 (1.45-1.64)		1.17 (1.06-1.30)	
1	**Prevalent T2DM †**	Women	1.53 (1.24-1.82)	**1.06 (0.82-1.37)**	1.75 (1.27-2.04)	**1.09 (0.80-1.47)**	1.43 (1.06-2.10)	**1.12 (0.71-1.77)**
		Men	1.45 (1.22-1.72)		1.61 (1.34-2.07)		1.28 (0.95-1.75)	

* Incident T2DM N=79,985; Controls N=386,547
† Prevalent T2DM N=77,494; Controls N=294,213

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