

Supplementary table 1 Definition of health conditions

Health condition	ICPC-2	ICD-9-CM	Others
Type II diabetes mellitus	T90	NA	NA
Cardiovascular diseases	K74-77, K89-91	410.x-414.x, 428.x, 430.x-438.x	NA
Coronary heart disease	K74-76	410.x-414.x	NA
Stroke	K89-91	430.x-438.x	NA
Heart failure	K77	428.x	NA
Peripheral vascular disease	K92	250.6x, 440.2x, 997.2, 997.6x	NA
All-cause mortality	NA	NA	Hong Kong Death Registry

ICPC-2 = International Classification of Primary Care, 2nd edition; ICD-9-CM = International Classification of Diseases, Ninth Revision, Clinical Modification

Supplementary table 2. Calculations of continuity of care measures

Measure	Formula
Usual provider continuity index (UPCI)	$UPCI = \frac{n_{max}}{N}$ <p> <math>n_{max}</math> = the number of visits given by the most frequently visited team  <math>N</math> = the total number of visits of the patient </p>
Continuity of care index (COCI)	$COCI = \frac{\sum_{i=1}^k n_i^2 - N}{N(N-1)}$ <p> <math>k</math> = number of teams  <math>n_i</math> = number of visits to team <math>i</math>  <math>N</math> = total number of visits of the patient </p>
Modified modified continuity index (MMCI)	$MMCI = \frac{1 - \frac{k}{N + 0.1}}{1 - \frac{1}{N + 0.1}}$ <p> <math>k</math> = number of teams  <math>N</math> = total number of visits of the patient </p>
Sequential continuity index (SECON)	$SECON = \frac{\varphi_i + \dots + \varphi_{N-1}}{N-1}$ <p> <math>\varphi = 1</math> when current and the subsequent visits are given by the same team  <math>\varphi = 0</math> when current and the subsequent visits are given by the same team  <math>N</math> = the total number of visits of the patient </p>

Supplementary table 3. Data completion rate of baseline characteristics

	Baseline
	Total = 312,167
Age	312,167 (100.0%)
Sex	312,167 (100.0%)
Smoker	312,167 (100.0%)
Body mass index	264,509 (84.7%)
Systolic blood pressure	311,562 (99.8%)
Diastolic blood pressure	311,563 (99.8%)
Haemoglobin A1c	301,479 (96.6%)
Low-density lipoprotein	269,306 (86.3%)
Estimated glomerular filtration rate	287,188 (92.0%)
Charlson's index	312,167 (100.0%)
Use of anti-diabetic drugs	312,167 (100.0%)
Use of anti-hypertensive drugs	312,167 (100.0%)
Use of lipid-lowering agents	312,167 (100.0%)
Number of attendances	312,167 (100.0%)

Supplementary table 4a Baseline characteristics by team-based UPCI quartiles after multiple imputation and weighting with complete case only

	1 <sup>st</sup> quartile UPCI <0.50 (N = 50,060)	2 <sup>nd</sup> quartile UPCI 0.50-0.72 (N = 72,273)	3 <sup>rd</sup> quartile UPCI 0.73-0.91 (N = 60,335)	4 <sup>th</sup> quartile UPCI 0.92-1.0 (N = 63,716)	SMD
Male	23,302 (46.5%)	33,271 (46.0%)	27,821 (46.1%)	29,456 (46.2%)	0.01
Age, year	62.5 (11.2)	62.7 (11.3)	62.7 (11.3)	62.8 (11.1)	0.03
Smoker	3,333 (6.7%)	4,647 (6.4%)	4,057 (6.7%)	4,459 (7.0%)	0.02
SBP, mmHg	133.8 (17.0)	133.7 (16.6)	133.7 (16.5)	133.9 (16.4)	<0.01
DBP, mmHg	75.1 (10.3)	74.9 (10.2)	74.9 (9.9)	74.9 (9.8)	0.02
HbA1c, %	7.1 (1.2)	7.1 (1.2)	7.1 (1.2)	7.1 (1.2)	0.02
HbA1c, mmol/mol	54.5 (13.6)	54.3 (13.0)	54.3 (12.9)	54.5 (12.8)	0.02
BMI, kg/m <sup>2</sup>	25.8 (4.0)	25.8 (4.1)	25.8 (4.1)	25.7 (4.0)	<0.01
LDL-C, mmol/L	2.8 (0.8)	2.8 (0.8)	2.8 (0.8)	2.8 (0.8)	0.01
eGFR, ml/min/1.73m <sup>2</sup>	105.9 (28.3)	104.9 (29.1)	104.9 (29.8)	104.7 (35.4)	0.04
Charlson comorbidity index	3.8 (1.2)	3.8 (1.2)	3.8 (1.2)	3.8 (1.2)	0.02
Use of anti-diabetic drugs	41,191 (82.3%)	59,400 (82.2%)	49,766 (82.5%)	52,748 (82.8%)	0.02
Use of anti-hypertensive drugs	36,579 (73.1%)	53,728 (74.3%)	44,562 (73.9%)	46,562 (73.1%)	0.03
Use of lipid-lowering agents	14,955 (29.9%)	22,075 (30.5%)	18,310 (30.3%)	19,027 (29.9%)	0.01
Number of attendances	12 (5.2)	12 (4.6)	12 (4.2)	12 (4.4)	0.03
Usual provider continuity index	0.37 (0.08)	0.61 (0.07)	0.84 (0.06)	0.99 (0.02)	NA

The values are presented as mean (SD) or number (%), as appropriate.

The groups were adjusted with fine stratification weights with propensity score generated by multivariable logistic regression adjusted with the listed parameters except UPCI

The SMD listed is the largest SMD between any pairs of the quartiles. A SMD less than 0.2 indicates sufficient balance for the characteristic

UPCI = Usual provider continuity index; SMD = Standardized mean difference; SBP = Systolic blood pressure; DBP = Diastolic blood pressure; HbA1c = Haemoglobin A1c; BMI = Body mass index; LDL-C = Low density lipoprotein - cholesterol; eGFR = Estimated glomerular filtration rate; NA = Not applicable

Supplementary table 4b Baseline characteristics by team-based UPCI quartiles after multiple imputation and weighting with at least three years of follow-up

	1 <sup>st</sup> quartile UPCI <0.50 (N = 50,787)	2 <sup>nd</sup> quartile UPCI 0.50-0.74 (N = 71,812)	3 <sup>rd</sup> quartile UPCI 0.75-0.91 (N = 60,650)	4 <sup>th</sup> quartile UPCI 0.92-1.0 (N = 63,911)	SMD
Male	24,587 (48.4%)	34,344 (47.8%)	29,118 (48.0%)	30,723 (48.1%)	0.01
Age, year	62.4 (11.2)	62.7 (11.2)	62.6 (11.2)	62.8 (11.1)	0.04
Smoker	3,551 (7.0%)	4,899 (6.8%)	4,251 (7.0%)	4,615 (7.2%)	0.02
SBP, mmHg	132.6 (16.4)	132.5 (16.2)	132.5 (16.0)	132.7 (15.9)	0.01
DBP, mmHg	75.0 (10.3)	74.8 (10.1)	74.9 (9.8)	74.8 (9.7)	0.02
HbA1c, %	7.0 (1.2)	7.0 (1.1)	7.0 (1.1)	7.0 (1.1)	0.03
HbA1c, mmol/mol	53.5 (12.9)	53.2 (12.4)	53.3 (12.3)	53.5 (12.2)	0.03
BMI, kg/m <sup>2</sup>	25.9 (4.1)	25.9 (4.1)	25.9 (4.1)	25.8 (4.1)	0.01
LDL-C, mmol/L	2.7 (0.8)	2.7 (0.8)	2.7 (0.8)	2.7 (0.8)	0.02
eGFR, ml/min/1.73m <sup>2</sup>	106.7 (28.2)	105.8 (27.2)	105.7 (29.4)	106.7 (70.6)	0.03
Charlson comorbidity index	3.8 (1.2)	3.8 (1.2)	3.8 (1.2)	3.8 (1.2)	0.02
Use of anti-diabetic drugs	41,262 (81.2%)	58,142 (81.0%)	49,245 (81.2%)	52,165 (81.6%)	0.02
Use of anti-hypertensive drugs	37,525 (73.9%)	54,007 (75.2%)	45,347 (74.8%)	47,315 (74.0%)	0.03
Use of lipid-lowering agents	20,926 (41.2%)	30,445 (42.4%)	25,449 (42.0%)	26,340 (41.2%)	0.02
Number of attendances	12 (5.1)	12 (4.6)	12 (4.2)	12 (4.5)	0.02
Usual provider continuity index	0.36 (0.08)	0.60 (0.07)	0.84 (0.06)	0.99 (0.02)	NA

The values are presented as mean (SD) or number (%), as appropriate.

The groups were adjusted with fine stratification weights with propensity score generated by multivariable logistic regression adjusted with the listed parameters except UPCI

The SMD listed is the largest SMD between any pairs of the quartiles. A SMD less than 0.2 indicates sufficient balance for the characteristic

UPCI = Usual provider continuity index; SMD = Standardized mean difference; SBP = Systolic blood pressure; DBP = Diastolic blood pressure; HbA1c = Haemoglobin A1c; BMI = Body mass index; LDL-C = Low density lipoprotein - cholesterol; eGFR = Estimated glomerular filtration rate; NA = Not applicable

Supplementary table 4c Baseline characteristics by team-based COCI quartiles after multiple imputation and weighting

	1 <sup>st</sup> quartile COCI <0.32 (N = 77,906)	2 <sup>nd</sup> quartile COCI 0.32-0.54 (N = 78,044)	3 <sup>rd</sup> quartile COCI 0.55-0.84 (N = 75,799)	4 <sup>th</sup> quartile COCI 0.85-1.0 (N = 80,304)	SMD
Male	37,099 (47.6%)	36,585 (46.9%)	35,888 (47.3%)	37,819 (47.1%)	0.01
Age, year	63.1 (11.4)	63.4 (11.5)	63.2 (11.5)	63.6 (11.3)	0.04
Smoker	5,048 (6.5%)	4,920 (6.3%)	5,030 (6.6%)	5,481 (6.8%)	0.02
SBP, mmHg	133.6 (17.0)	133.4 (16.6)	133.5 (16.5)	133.7 (16.4)	0.02
DBP, mmHg	74.9 (10.4)	74.7 (10.2)	74.7 (10.0)	74.6 (9.9)	0.03
HbA1c, %	7.1 (1.2)	7.1 (1.2)	7.1 (1.2)	7.1 (1.2)	0.03
HbA1c, mmol/mol	54.1 (13.5)	53.8 (12.9)	54.0 (12.8)	54.2 (12.7)	0.03
BMI, kg/m <sup>2</sup>	25.8 (4.1)	25.8 (4.1)	25.8 (4.1)	25.8 (4.0)	0.01
LDL-C, mmol/L	2.8 (0.8)	2.8 (0.8)	2.8 (0.8)	2.8 (0.9)	0.02
eGFR, ml/min/1.73m <sup>2</sup>	105.1 (29.5)	104.4 (40.3)	104.4 (33.1)	104.4 (44.9)	0.02
Charlson comorbidity index	3.9 (1.2)	3.9 (1.2)	3.9 (1.2)	3.9 (1.2)	0.02
Use of anti-diabetic drugs	63,457 (81.5%)	63,277 (81.1%)	61,623 (81.3%)	65,745 (81.9%)	0.02
Use of anti-hypertensive drugs	57,963 (74.4%)	58,780 (75.3%)	56,480 (74.5%)	59,471 (74.1%)	0.03
Use of lipid-lowering agents	27,365 (35.1%)	27,813 (35.6%)	26,499 (35.0%)	27,471 (34.2%)	0.03
Number of attendances	12 (5.4)	12 (4.5)	12 (4.0)	12 (4.5)	0.04
Continuity of care index	0.20 (0.08)	0.43 (0.06)	0.71 (0.09)	0.98 (0.04)	NA

The values are presented as mean (SD) or number (%), as appropriate.

The groups were adjusted with fine stratification weights with propensity score generated by multivariable logistic regression adjusted with the listed parameters except COCI

The SMD listed is the largest SMD between any pairs of the quartiles. A SMD less than 0.2 indicates sufficient balance for the characteristic

COCI = Continuity of care index; SMD = Standardized mean difference; SBP = Systolic blood pressure; DBP = Diastolic blood pressure; HbA1c = Haemoglobin A1c; BMI = Body mass index; LDL-C = Low density lipoprotein - cholesterol; eGFR = Estimated glomerular filtration rate; NA = Not applicable

Supplementary table 4d Baseline characteristics by team-based MMCI quartiles after multiple imputation and weighting

	1 <sup>st</sup> quartile MMCI <0.72 (N = 77,337)	2 <sup>nd</sup> quartile MMCI 0.72-0.83 (N = 73,440)	3 <sup>rd</sup> quartile MMCI 0.84-0.92 (N = 81,177)	4 <sup>th</sup> quartile MMCI 0.93-1.0 (N = 79,441)	SMD
Male	36,794 (47.6%)	34,268 (46.7%)	38,331 (47.2%)	37,302 (47.0%)	0.02
Age, year	63.1 (11.5)	63.7 (11.6)	63.1 (11.7)	63.6 (11.3)	0.06
Smoker	5,067 (6.6%)	4,652 (6.3%)	5,340 (6.6%)	5,244 (6.6%)	0.01
SBP, mmHg	133.2 (16.8)	133.6 (16.6)	133.3 (16.4)	133.7 (16.4)	0.03
DBP, mmHg	74.8 (10.4)	74.5 (10.2)	74.7 (10.0)	74.6 (9.9)	0.02
HbA1c, %	7.1 (1.2)	7.1 (1.2)	7.1 (1.1)	7.1 (1.2)	0.03
HbA1c, mmol/mol	53.7 (13.2)	54.0 (13.2)	53.8 (12.5)	54.1 (12.6)	0.03
BMI, kg/m <sup>2</sup>	25.8 (4.1)	25.8 (4.1)	25.8 (4.1)	25.8 (4.0)	0.02
LDL-C, mmol/L	2.7 (0.8)	2.8 (0.8)	2.8 (0.8)	2.8 (0.9)	0.04
eGFR, ml/min/1.73m <sup>2</sup>	105.4 (29.1)	104.1 (31.0)	104.4 (31.6)	104.5 (69.5)	0.05
Charlson comorbidity index	3.9 (1.2)	3.9 (1.2)	3.9 (1.2)	3.9 (1.2)	0.04
Use of anti-diabetic drugs	63,016 (81.5%)	58,946 (80.3%)	65,569 (80.8%)	65,053 (81.9%)	0.04
Use of anti-hypertensive drugs	58,011 (75.0%)	55,654 (75.8%)	59,969 (73.9%)	59,242 (74.6%)	0.04
Use of lipid-lowering agents	28,596 (37.0%)	26,184 (35.7%)	29,356 (36.2%)	27,298 (34.4%)	0.05
Number of attendances	12 (5.7)	12 (4.8)	12 (4.5)	12 (4.9)	0.04
Modified modified continuity index	0.58 (0.14)	0.79 (0.03)	0.89 (0.02)	0.99 (0.02)	NA

The values are presented as mean (SD) or number (%), as appropriate.

The groups were adjusted with fine stratification weights with propensity score generated by multivariable logistic regression adjusted with the listed parameters except MMCI

The SMD listed is the largest SMD between any pairs of the quartiles. A SMD less than 0.2 indicates sufficient balance for the characteristic

MMCI = Modified modified continuity index; SMD = Standardized mean difference; SBP = Systolic blood pressure; DBP = Diastolic blood pressure; HbA1c = Haemoglobin A1c; BMI = Body mass index; LDL-C = Low density lipoprotein - cholesterol; eGFR = Estimated glomerular filtration rate; NA = Not applicable

Supplementary table 4e Baseline characteristics by team-based SECON after multiple imputation and weighting

	1 <sup>st</sup> quartile SECON <0.50 (N = 74,865)	2 <sup>nd</sup> quartile SECON 0.50-0.72 (N = 80,953)	3 <sup>rd</sup> quartile SECON 0.73-0.90 (N = 76,152)	4 <sup>th</sup> quartile SECON 0.91-1.0 (N = 80,038)	SMD
Male	35,872 (47.9%)	38,058 (47.0%)	35,706 (46.9%)	37,737 (47.1%)	0.02
Age, year	62.9 (11.4)	63.4 (11.6)	63.3 (11.4)	63.5 (11.4)	0.06
Smoker	4,984 (6.7%)	5,114 (6.3%)	4,922 (6.5%)	5,467 (6.8%)	0.02
SBP, mmHg	133.5 (16.9)	133.5 (16.6)	133.5 (16.6)	133.7 (16.4)	0.01
DBP, mmHg	74.9 (10.5)	74.7 (10.2)	74.6 (10.0)	74.7 (9.9)	0.03
HbA1c, %	7.1 (1.3)	7.1 (1.2)	7.1 (1.2)	7.1 (1.2)	0.03
HbA1c, mmol./mol	54.2 (13.7)	53.8 (12.9)	54.0 (12.8)	54.2 (12.8)	0.03
BMI, kg/m <sup>2</sup>	25.8 (4.1)	25.8 (4.1)	25.8 (4.1)	25.8 (4.1)	0.01
LDL-C, mmol/L	2.8 (0.8)	2.8 (0.8)	2.8 (0.8)	2.8 (0.9)	0.02
eGFR, ml/min/1.73m <sup>2</sup>	105.5 (33.2)	104.3 (28.3)	104.4 (64.6)	104.9 (65.1)	0.04
Charlson comorbidity index	3.9 (1.2)	3.9 (1.2)	3.9 (1.2)	3.9 (1.2)	0.04
Use of anti-diabetic drugs	60,889 (81.3%)	65,399 (80.8%)	61,912 (81.3%)	65,493 (81.8%)	0.03
Use of anti-hypertensive drugs	55,210 (73.7%)	61,188 (75.6%)	57,056 (74.9%)	59,113 (73.9%)	0.04
Use of lipid-lowering agents	26,183 (35.0%)	28,871 (35.7%)	26,741 (35.1%)	27,455 (34.3%)	0.03
Number of attendances	12 (5.3)	12 (4.4)	12 (4.2)	12 (4.5)	0.05
Sequential continuity index	0.28 (0.14)	0.61 (0.08)	0.83 (0.05)	0.99 (0.02)	NA

The values are presented as mean (SD) or number (%), as appropriate.

The groups were adjusted with fine stratification weights with propensity score generated by multivariable logistic regression adjusted with the listed parameters except SECON

The SMD listed is the largest SMD between any pairs of the quartiles. A SMD less than 0.2 indicates sufficient balance for the characteristic

SECON = Sequential continuity index; SMD = Standardized mean difference; SBP = Systolic blood pressure; DBP = Diastolic blood pressure; HbA1c = Haemoglobin A1c; BMI = Body mass index; LDL-C = Low density lipoprotein - cholesterol; eGFR = Estimated glomerular filtration rate; NA = Not applicable



Supplementary table 4f Baseline characteristics by team-based UPCI quartiles after multiple imputation and weighting of patients with at least five attended medical consultations

	1 <sup>st</sup> quartile UPCI <0.51 (N = 76,350)	2 <sup>nd</sup> quartile UPCI 0.51-0.74 (N = 73,982)	3 <sup>rd</sup> quartile UPCI 0.75-0.92 (N = 78,355)	4 <sup>th</sup> quartile UPCI 0.93-1.0 (N = 76,937)	SMD
Male	36,217 (47.4%)	34,572 (46.7%)	36,770 (46.9%)	36,078 (46.9%)	0.01
Age, year	63.2 (11.5)	63.5 (11.5)	63.4 (11.4)	63.7 (11.2)	0.04
Smoker	4,990 (6.5%)	4,678 (6.3%)	5,161 (6.6%)	5,142 (6.7%)	0.01
SBP, mmHg	133.5 (16.9)	133.5 (16.5)	133.5 (16.5)	133.7 (16.3)	0.02
DBP, mmHg	74.8 (10.3)	74.6 (10.2)	74.6 (10.0)	74.6 (9.9)	0.02
HbA1c, %	7.1 (1.2)	7.1 (1.2)	7.1 (1.2)	7.1 (1.1)	0.02
HbA1c, mmol/mol	54.0 (13.3)	53.8 (12.8)	53.9 (12.6)	54.1 (12.6)	0.02
BMI, kg/m <sup>2</sup>	25.8 (4.1)	25.8 (4.1)	25.8 (4.1)	25.8 (4.0)	<0.01
LDL-C, mmol/L	2.8 (0.8)	2.8 (0.8)	2.8 (0.8)	2.8 (0.9)	0.02
eGFR, ml/min/1.73m <sup>2</sup>	105.0 (29.3)	104.2 (40.2)	104.2 (33.5)	104.2 (45.4)	0.02
Charlson comorbidity index	3.9 (1.2)	3.9 (1.2)	3.9 (1.2)	3.9 (1.2)	0.03
Use of anti-diabetic drugs	62,461 (81.8%)	60,367 (81.6%)	64,160 (81.9%)	63,290 (82.3%)	0.02
Use of anti-hypertensive drugs	57,153 (74.9%)	56,186 (75.9%)	59,096 (75.4%)	57,881 (75.2%)	0.03
Use of lipid-lowering agents	26,607 (34.8%)	26,237 (35.5%)	27,405 (35.0%)	26,295 (34.2%)	0.03
Number of attendances	12 (4.9)	12 (4.4)	12 (4.2)	12 (4.5)	0.03
Usual provider continuity index	0.40 (0.09)	0.63 (0.06)	0.84 (0.06)	0.99 (0.02)	NA

The values are presented as mean (SD) or number (%), as appropriate.

The groups were adjusted with fine stratification weights with propensity score generated by multivariable logistic regression adjusted with the listed parameters except UPCI

The SMD listed is the largest SMD between any pairs of the quartiles. A SMD less than 0.2 indicates sufficient balance for the characteristic

UPCI = Usual provider continuity index; SMD = Standardized mean difference; SBP = Systolic blood pressure; DBP = Diastolic blood pressure; HbA1c = Haemoglobin A1c; BMI = Body mass index; LDL-C = Low density lipoprotein - cholesterol; eGFR = Estimated glomerular filtration rate; NA = Not applicable

Supplementary table 4g Baseline characteristics by team-based UPCI quartiles after multiple imputation and weighting of patients with at least eight attended medical consultations

	1 <sup>st</sup> quartile UPCI <0.50 (N = 56,243)	2 <sup>nd</sup> quartile UPCI 0.50-0.74 (N = 81,827)	3 <sup>rd</sup> quartile UPCI 0.75-0.91 (N = 68,727)	4 <sup>th</sup> quartile UPCI 0.92-1.0 (N = 72,644)	SMD
Male	26,055 (46.3%)	37,796 (46.2%)	31,878 (46.4%)	33,874 (46.6%)	<0.01
Age, year	63.7 (11.5)	63.8 (11.4)	63.7 (11.4)	63.8 (11.2)	0.01
Smoker	3,667 (6.5%)	5,239 (6.4%)	4,455 (6.5%)	4,986 (6.9%)	0.02
SBP, mmHg	133.8 (16.8)	133.7 (16.5)	133.7 (16.5)	133.7 (16.3)	<0.01
DBP, mmHg	74.6 (10.3)	74.5 (10.2)	74.5 (10.0)	74.5 (9.9)	<0.01
HbA1c, %	7.1 (1.2)	7.1 (1.2)	7.1 (1.1)	7.1 (1.1)	0.01
HbA1c, mmol/mol	53.9 (13.1)	53.8 (12.7)	53.9 (12.5)	54.0 (12.4)	0.01
BMI, kg/m <sup>2</sup>	25.8 (4.1)	25.8 (4.1)	25.8 (4.1)	25.8 (4.0)	<0.01
LDL-C, mmol/L	2.8 (0.8)	2.8 (0.8)	2.8 (0.8)	2.8 (0.9)	0.01
eGFR, ml/min/1.73m <sup>2</sup>	104.3 (28.9)	103.9 (43.2)	104.1 (66.9)	104.6 (68.0)	0.01
Charlson comorbidity index	3.9 (1.2)	3.9 (1.2)	3.9 (1.2)	3.9 (1.2)	<0.01
Use of anti-diabetic drugs	46,613 (82.9%)	67,531 (82.5%)	56,836 (82.7%)	60,159 (82.8%)	<0.01
Use of anti-hypertensive drugs	42,928 (76.3%)	62,811 (76.8%)	52,690 (76.7%)	55,352 (76.2%)	0.01
Use of lipid-lowering agents	18,633 (33.1%)	27,675 (33.8%)	22,912 (33.3%)	24,447 (33.7%)	0.01
Number of attendances	13 (4.6)	13 (4.3)	13 (4.3)	13 (4.3)	0.02
Usual provider continuity index	0.37 (0.08)	0.61 (0.07)	0.84 (0.05)	0.99 (0.03)	NA

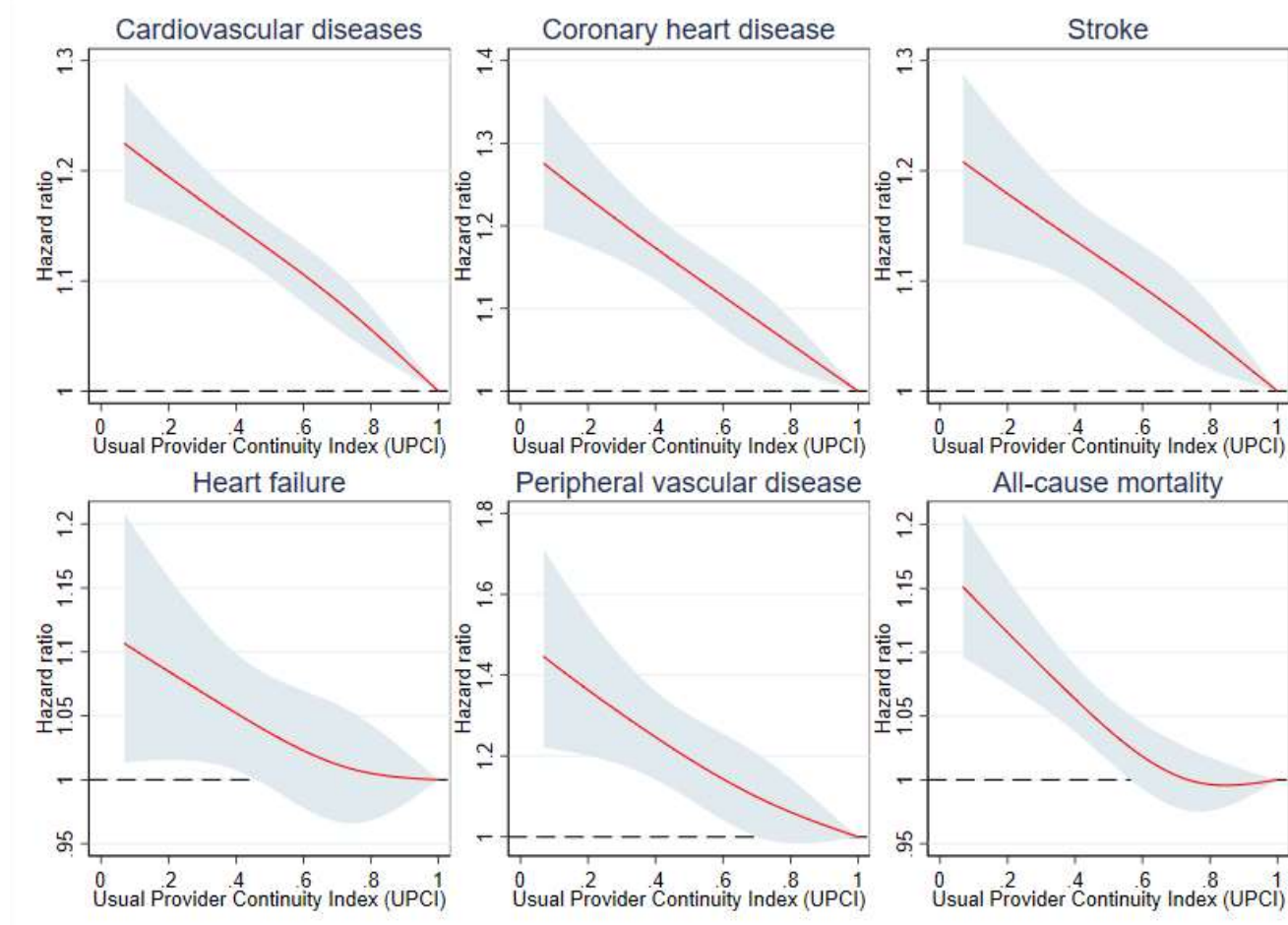
The values are presented as mean (SD) or number (%), as appropriate.

The groups were adjusted with fine stratification weights with propensity score generated by multivariable logistic regression adjusted with the listed parameters except UPCI

The SMD listed is the largest SMD between any pairs of the quartiles. A SMD less than 0.2 indicates sufficient balance for the characteristic

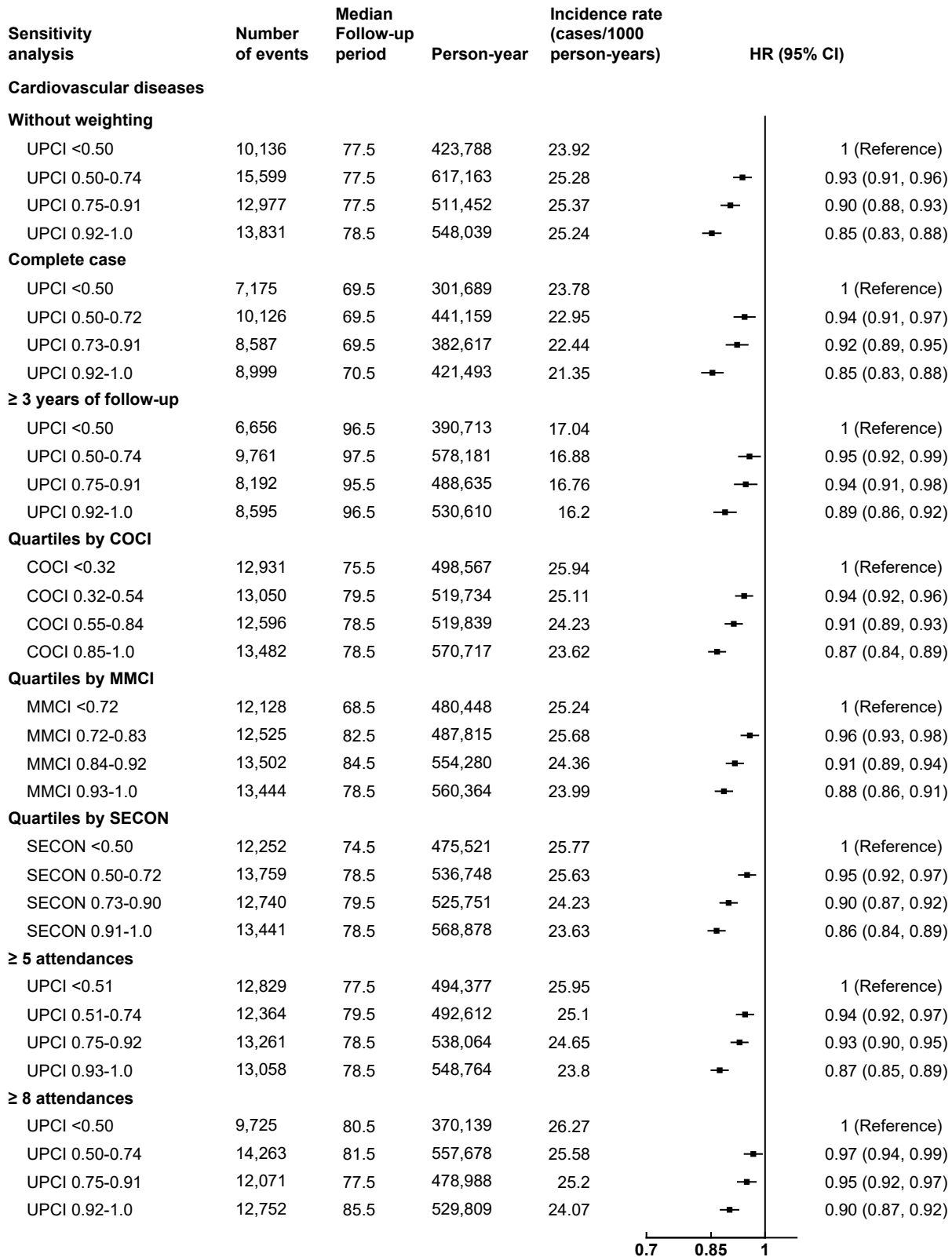
UPCI = Usual provider continuity index; SMD = Standardized mean difference; SBP = Systolic blood pressure; DBP = Diastolic blood pressure; HbA1c = Haemoglobin A1c; BMI = Body mass index; LDL-C = Low density lipoprotein - cholesterol; eGFR = Estimated glomerular filtration rate; NA = Not applicable

Supplementary figure 1 Restricted cubic splines on the association between usual provider continuity index and cardiovascular diseases or mortality



Regression was adjusted by age, sex, smoking status, systolic and diastolic blood pressure, body mass index, haemoglobin A1c, low-density lipoprotein cholesterol, estimated glomerular filtration rate, Charlson comorbidity index, number of attendances, use of anti-hypertensive drug, use of lipid-lowering drug and use of anti-diabetic drug at the baseline

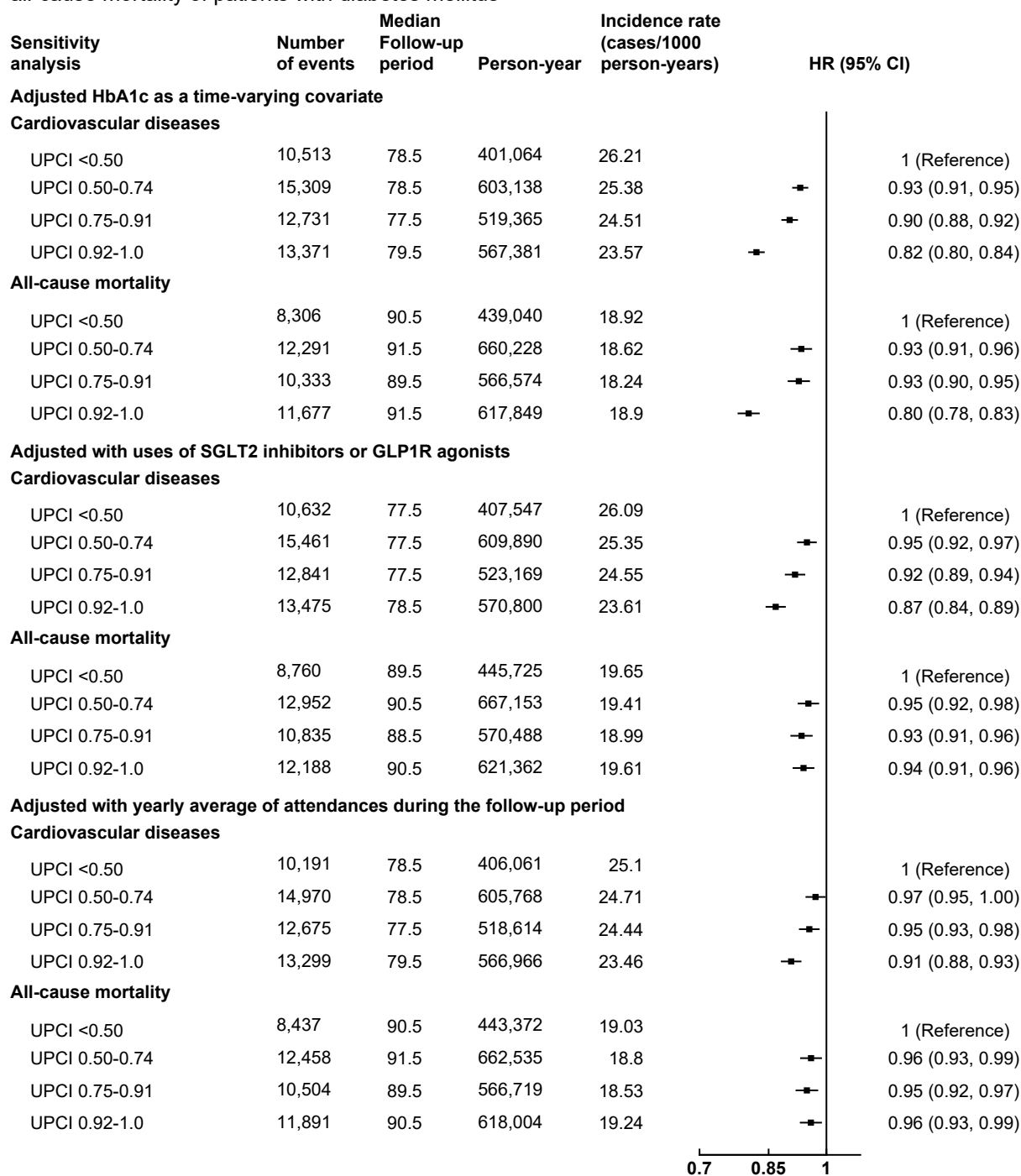
Supplementary figure 2a. Sensitivity analyses on association of team-based continuity of care with CVD of patients with diabetes mellitus



All cut-offs were based on quartiles of the sample. Hazard ratio was adjusted by age, sex, smoking status, systolic and diastolic blood pressure, body mass index, HbA1c, low-density lipoprotein cholesterol, estimated glomerular filtration rate, Charlson comorbidity index, number of attendances, use of anti-hypertensive drug, use of lipid-lowering drug and use of anti-diabetic drug at baseline.

CVD includes coronary heart disease, heart failure and stroke; HR = Hazard ratio; CVD = Cardiovascular diseases; HbA1c = Haemoglobin A1c; CI = Confidence interval; UPCI = Usual provider continuity index; COCI = Continuity of care index; MMCI = Modified modified continuity index; SECON = Sequential continuity index

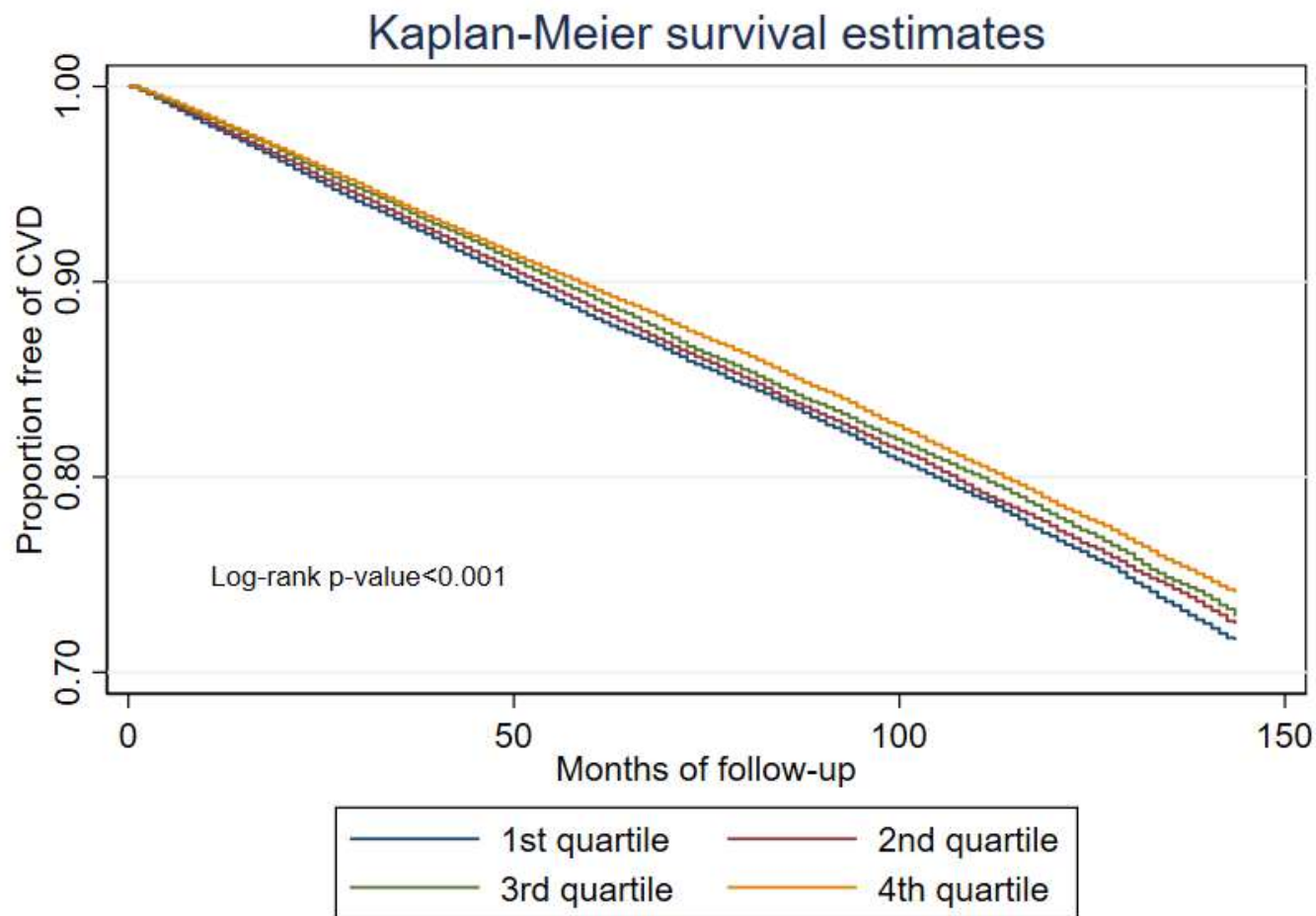
Supplementary figure 2b. Sensitivity analyses on association of team-based continuity of care with CVD or all-cause mortality of patients with diabetes mellitus



All cut-offs were based on quartiles of the sample. Hazard ratio was adjusted by age, sex, smoking status, systolic and diastolic blood pressure, body mass index, HbA1c, low-density lipoprotein cholesterol, estimated glomerular filtration rate, Charlson comorbidity index, number of attendances, use of anti-hypertensive drug, use of lipid-lowering drug and use of anti-diabetic drug at baseline.

CVD includes coronary heart disease, heart failure and stroke; HR = Hazard ratio; CVD = Cardiovascular diseases; HbA1c = Haemoglobin A1c; CI = Confidence interval; UPCI = Usual provider continuity index; SGLT2 = Sodium-glucose transport protein 2; GLP1R = Glucagon-like peptide-1 receptor

Supplementary figure 3 Kaplan-Meier survival curve of cardiovascular diseases for patients with diabetes mellitus by team-based usual provider continuity index quartiles



UPCI cut-offs of the quartiles were: <0.5; 0.5-0.74; 0.75-0.91; 0.92-1.0. CVD = Cardiovascular diseases; UPCI = Usual provider continuity index