

Supplementary Appendix

Methodology for adjusted extrapolation to the United Kingdom (UK) population

Findings on the number of patients treated according to National Institute for Health and Care Excellence (NICE) 2014 guidelines were extrapolated to the UK population via the following methodology that accounted for adjustments by patient demographic and clinical profiles. The study cohort was initially divided into mutually exclusive strata based on status representing presence of coronary heart disease (CHD; including recent acute coronary syndrome [ACS] and other CHD), ischaemic stroke / transient ischaemic attack (TIA), peripheral arterial disease (PAD), diabetes mellitus (DM), chronic kidney disease (CKD), dichotomous age groups (20–70 years versus ≥ 70 years), and gender. An example of strata would be a profile representing male, aged ≥ 70 years, with CHD and DM. Differential weights by these mutually exclusive strata were then estimated via an optimisation algorithm to minimise the difference between estimated totals for aggregate categories (not mutually exclusive) representing CHD, ischaemic stroke/TIA, PAD, DM, CKD, age groups, and gender, and their reported prevalence in the UK based on published sources. The estimated weights by strata were then utilised to scale the results. The methodology helped ensure the extrapolation accounted for differential scaling by patient profiles and eliminated double counting due to overlap between conditions. Estimation of weights via optimisation methodology was conducted using Excel Solver.

Methodology for estimation of QRISK2 10-year risk

The QRISK2 10-year risk was estimated only for the non-ASCVD T2DM population in our study. It was estimated as: $\text{Risk} = 1 - S_0^{\exp(\sum \beta_i X_i)}$, with S_0 and β_i obtained from the QResearch® group at <https://github.com/robdyke/clinrisk-qRisk2/tree/master/QRISK2-2015-1qpl-source>. The calculation was validated by comparing the calculated result for 50 random patients with the online version of the QRISK2 risk calculator, available at: <https://qrisk.org/2016>. In case a variable (e.g. BP) was not available as of the index date, an older value was searched and the most recent data was utilised. In case the value for a particular variable was completely missing, the calculation was conducted without adding the corresponding $\beta_i X_i$ term, which effectively meant an incremental regression of the 10-year risk estimate towards S_0 , denoting an approximately 1% 10-year risk. In other words, any missing data resulted in a calculation that made it more likely that a patient would not qualify under 10-year risk $\geq 10\%$ criterion. Approximately 20% of the non-ASCVD T2DM population had at least one missing variable for the estimation of QRISK2 10-year risk, with more than 90% of these instances representing missing data on the social deprivation index.

SUPPLEMENTAL TABLE S1. Standardised Diagnostic Read Codes Used to Define Patient Cohorts

ASCVD	
ACS	
G30..00	ACUTE MYOCARDIAL INFARCTION
G30..11	ATTACK - HEART
G30..12	Coronary thrombosis
G30..13	CARDIAC RUPTURE FOLLOWING MYOCARDIAL INFARCTION (MI)
G30..14	HEART ATTACK
G30..15	MI - ACUTE MYOCARDIAL INFARCTION
G30..16	Thrombosis - coronary
G300.00	ACUTE ANTEROLATERAL INFARCTION
G301.00	OTHER SPECIFIED ANTERIOR MYOCARDIAL INFARCTION
G301000	ACUTE ANTEROAPICAL INFARCTION
G301100	ACUTE ANTEROSEPTAL INFARCTION
G301z00	ANTERIOR MYOCARDIAL INFARCTION NOS
G302.00	ACUTE INFEROLATERAL INFARCTION
G303.00	ACUTE INFEROPOSTERIOR INFARCTION
G304.00	POSTERIOR MYOCARDIAL INFARCTION NOS
G305.00	LATERAL MYOCARDIAL INFARCTION NOS
G306.00	TRUE POSTERIOR MYOCARDIAL INFARCTION
G307.00	ACUTE SUBENDOCARDIAL INFARCTION
G307000	ACUTE NON-Q WAVE INFARCTION
G307100	ACUTE NON-ST SEGMENT ELEVATION MYOCARDIAL INFARCTION
G308.00	INFERIOR MYOCARDIAL INFARCTION NOS
G309.00	ACUTE Q-WAVE INFARCT
G30B.00	ACUTE POSTEROLATERAL MYOCARDIAL INFARCTION

G30X.00	ACUTE TRANSMURAL MYOCARDIAL INFARCTION OF UNSPECIFIED SITE
G30X000	ACUTE ST SEGMENT ELEVATION MYOCARDIAL INFARCTION
G30y.00	OTHER ACUTE MYOCARDIAL INFARCTION
G30y000	ACUTE ATRIAL INFARCTION
G30y100	ACUTE PAPILLARY MUSCLE INFARCTION
G30y200	ACUTE SEPTAL INFARCTION
G30yz00	OTHER ACUTE MYOCARDIAL INFARCTION NOS
G30z.00	ACUTE MYOCARDIAL INFARCTION NOS
G31..00	Other acute and subacute ischaemic heart disease
G310.00	Postmyocardial infarction syndrome
G310.11	Dressler's syndrome
G311500	Acute coronary syndrome
G312.00	Coronary thrombosis not resulting in myocardial infarction
G31y.00	Other acute and subacute ischaemic heart disease
G31y000	Acute coronary insufficiency
G31y100	MICROINFARCTION OF HEART
G31y200	Subendocardial ischaemia
G31y300	Transient myocardial ischaemia
G31yz00	Other acute and subacute ischaemic heart disease NOS
G35..00	Subsequent myocardial infarction
G350.00	Subsequent myocardial infarction of anterior wall
G351.00	Subsequent myocardial infarction of inferior wall
G353.00	Subsequent myocardial infarction of other sites
G35X.00	Subsequent myocardial infarction of unspecified site
G36..00	Certain current complication follow acute myocardial infarct
G360.00	Haemopericardium/current comp following acute myocardial infarction

G361.00	Atrial septal defect/current comp following acute myocardial infarction
G362.00	Ventric septal defect/current comp following acute myocardial infarction
G363.00	Rupture of cardiac wall without haemopericard/current comp following acute myocardial infarction
G364.00	Ruptur chordae tendinae/current comp following acute myocardial infarction
G365.00	Rupture papillary muscle/current comp following acute myocardial infarction
G366.00	Thrombosis atrium,auric appendvent/current comp following acute myocardial infarction
G38..00	Postoperative myocardial infarction
G380.00	Postoperative transmural myocardial infarction anterior wall
G381.00	Postoperative transmural myocardial infarction inferior wall
G382.00	Postoperative transmural myocardial infarction other sites
G383.00	Postoperative transmural myocardial infarction unspecified site
G384.00	Postoperative subendocardial myocardial infarction
G38z.00	Postoperative myocardial infarction, unspecified
Gyu3400	[X]ACUTE TRANSMURAL MYOCARDIAL INFARCTION OF UNSPECIFIED SITE
Gyu3500	[X]Subsequent myocardial infarction of other sites
Gyu3600	[X]Subsequent myocardial infarction of unspecified site
G311.00	Preinfarction syndrome
G311.11	Crescendo angina
G311.12	Impending infarction
G311.13	Unstable angina
G311.14	Angina at rest
G311000	Myocardial infarction aborted
G311011	MI - myocardial infarction aborted
G311100	Unstable angina
G311200	Angina at rest
G311300	Refractory angina

G311400	Worsening angina
G311z00	Preinfarction syndrome NOS
G330.00	Angina decubitus
G330000	Nocturnal angina
G330z00	Angina decubitus NOS
G33z500	Post infarct angina
G33z600	New onset angina
Other CHD	
792E000	Emergency percutaneous coronary intervention
7920.00	SAPHENOUS VEIN GRAFT REPLACEMENT OF CORONARY ARTERY
7920.11	SAPHENOUS VEIN GRAFT BYPASS OF CORONARY ARTERY
7921.00	OTHER AUTOGRAFT REPLACEMENT OF CORONARY ARTERY
7921.11	OTHER AUTOGRAFT BYPASS OF CORONARY ARTERY
7922.00	ALLOGRAFT REPLACEMENT OF CORONARY ARTERY
7922.11	ALLOGRAFT BYPASS OF CORONARY ARTERY
7923.00	PROSTHETIC REPLACEMENT OF CORONARY ARTERY
7923.11	PROSTHETIC BYPASS OF CORONARY ARTERY
7924.00	REVISION OF BYPASS FOR CORONARY ARTERY
7925.00	CONNECTION OF MAMMARY ARTERY TO CORONARY ARTERY
7925.11	CREATION OF BYPASS FROM MAMMARY ARTERY TO CORONARY ARTERY
7926.00	CONNECTION OF OTHER THORACIC ARTERY TO CORONARY ARTERY
7927.00	OTHER OPEN OPERATIONS ON CORONARY ARTERY
7928.00	TRANSLUMINAL BALLOON ANGIOPLASTY OF CORONARY ARTERY
7928.11	PERCUTANEOUS BALLOON CORONARY ANGIOPLASTY
7929.00	OTHER THERAPEUTIC TRANSLUMINAL OPERATIONS ON CORONARY ARTERY
7920000	SAPHENOUS VEIN GRAFT REPLACEMENT OF ONE CORONARY ARTERY

7920100	SAPHENOUS VEIN GRAFT REPLACEMENT OF TWO CORONARY ARTERIES
7920200	SAPHENOUS VEIN GRAFT REPLACEMENT OF THREE CORONARY ARTERIES
7920300	SAPHENOUS VEIN GRAFT REPLACEMENT OF FOUR+ CORONARY ARTERIES
7921000	AUTOGRAFT REPLACEMENT OF ONE CORONARY ARTERY NEC
7921100	AUTOGRAFT REPLACEMENT OF TWO CORONARY ARTERIES NEC
7921200	AUTOGRAFT REPLACEMENT OF THREE CORONARY ARTERIES NEC
7921300	AUTOGRAFT REPLACEMENT OF FOUR OF MORE CORONARY ARTERIES NEC
7922000	ALLOGRAFT REPLACEMENT OF ONE CORONARY ARTERY
7922100	ALLOGRAFT REPLACEMENT OF TWO CORONARY ARTERIES
7922200	ALLOGRAFT REPLACEMENT OF THREE CORONARY ARTERIES
7922300	ALLOGRAFT REPLACEMENT OF FOUR+ CORONARY ARTERIES
7923000	PROSTHETIC REPLACEMENT OF ONE CORONARY ARTERY
7923100	PROSTHETIC REPLACEMENT OF TWO CORONARY ARTERIES
7923200	PROSTHETIC REPLACEMENT OF THREE CORONARY ARTERIES
7923300	PROSTHETIC REPLACEMENT OF FOUR+ CORONARY ARTERIES
7924000	REVISION OF BYPASS FOR ONE CORONARY ARTERY
7924100	REVISION OF BYPASS FOR TWO CORONARY ARTERIES
7924200	REVISION OF BYPASS FOR THREE CORONARY ARTERIES
7924300	REVISION OF BYPASS FOR FOUR+ CORONARY ARTERIES
7924400	REVISION OF CONNECTION OF THORACIC ARTERY TO CORONARY ARTERY
7924500	REVISION OF IMPLANTATION OF THORACIC ARTERY INTO HEART
7925000	DOUBLE ANASTOMOSIS OF MAMMARY ARTERIES TO CORONARY ARTERIES
7925011	LIMA sequential anastomosis
7925012	RIMA sequential anastomosis
7925100	DOUBLE IMPLANT OF MAMMARY ARTERIES INTO CORONARY ARTERIES
7925200	SINGLE ANAST MAMMARY ART TO LEFT ANT DESCEND CORONARY ART

7925300	SINGLE ANASTOMOSIS OF MAMMARY ARTERY TO CORONARY ARTERY NEC
7925311	LIMA single anastomosis
7925312	RIMA single anastomosis
7925400	SINGLE IMPLANTATION OF MAMMARY ARTERY INTO CORONARY ARTERY
7926000	DOUBLE ANASTOM THORACIC ARTERIES TO CORONARY ARTERIES NEC
7926100	DOUBLE IMPLANT THORACIC ARTERIES INTO CORONARY ARTERIES NEC
7926200	SINGLE ANASTOMOSIS OF THORACIC ARTERY TO CORONARY ARTERY NEC
7926300	SINGLE IMPLANTATION THORACIC ARTERY INTO CORONARY ARTERY NEC
7927500	OPEN ANGIOPLASTY OF CORONARY ARTERY
7928000	PERCUT TRANSLUMINAL BALLOON ANGIOPLASTY ONE CORONARY ARTERY
7928100	PERCUT TRANSLUM BALLOON ANGIOPLASTY MULT CORONARY ARTERIES
7928200	PERCUT TRANSLUM BALLOON ANGIOPLASTY BYPASS GRAFT CORONARY A
7928300	PERCUT TRANSLUM CUTTING BALLOON ANGIOPLASTY CORONARY ARTERY
7929000	PERCUTANEOUS TRANSLUMINAL LASER CORONARY ANGIOPLASTY
7929100	Percut transluminal coronary thrombolysis with streptokinase
7929111	Percut translum coronary thrombolytic therapy - streptokinase
7929200	PERCUTAN. TRANSLUM. INJECT THERAP SUBST TO CORONARY ARTERY NEC
7929200	Percut translum inject therap subst to coronary artery NEC
7929300	ROTARY BLADE CORONARY ANGIOPLASTY
7929400	INSERTION OF CORONARY ARTERY STENT
7929500	INSERTION OF DRUG-ELUTING CORONARY ARTERY STENT
7929600	PERCUTANEOUS TRANSLUMINAL ATHERECTOMY OF CORONARY ARTERY
790H300	Revascularisation of wall of heart
792..00	CORONARY ARTERY OPERATIONS
792..11	CORONARY ARTERY BYPASS GRAFT OPERATIONS
7920y00	SAPHENOUS VEIN GRAFT REPLACEMENT OF CORONARY ARTERY OS

7920z00	SAPHENOUS VEIN GRAFT REPLACEMENT CORONARY ARTERY NOS
7921y00	OTHER AUTOGRAFT REPLACEMENT OF CORONARY ARTERY OS
7921z00	OTHER AUTOGRAFT REPLACEMENT OF CORONARY ARTERY NOS
7922y00	OTHER SPECIFIED ALLOGRAFT REPLACEMENT OF CORONARY ARTERY
7922z00	ALLOGRAFT REPLACEMENT OF CORONARY ARTERY NOS
7923y00	OTHER SPECIFIED PROSTHETIC REPLACEMENT OF CORONARY ARTERY
7923z00	PROSTHETIC REPLACEMENT OF CORONARY ARTERY NOS
7924y00	OTHER SPECIFIED REVISION OF BYPASS FOR CORONARY ARTERY
7924z00	REVISION OF BYPASS FOR CORONARY ARTERY NOS
7925y00	CONNECTION OF MAMMARY ARTERY TO CORONARY ARTERY OS
7925z00	CONNECTION OF MAMMARY ARTERY TO CORONARY ARTERY NOS
7926y00	CONNECTION OF OTHER THORACIC ARTERY TO CORONARY ARTERY OS
7926z00	CONNECTION OF OTHER THORACIC ARTERY TO CORONARY ARTERY NOS
7927y00	OTHER SPECIFIED OTHER OPEN OPERATION ON CORONARY ARTERY
7927z00	OTHER OPEN OPERATION ON CORONARY ARTERY NOS
7928y00	TRANSLUMINAL BALLOON ANGIOPLASTY OF CORONARY ARTERY OS
7928z00	TRANSLUMINAL BALLOON ANGIOPLASTY OF CORONARY ARTERY NOS
7929y00	OTHER THERAPEUTIC TRANSLUMINAL OP ON CORONARY ARTERY OS
7929z00	OTHER THERAPEUTIC TRANSLUMINAL OP ON CORONARY ARTERY NOS
792A.00	DIAGNOSTIC TRANSLUMINAL OPERATIONS ON CORONARY ARTERY
792B.00	REPAIR OF CORONARY ARTERY NEC
792B000	Endarterectomy of coronary artery NEC
792By00	Other specified repair of coronary artery
792Bz00	Repair of coronary artery NOS
792C.00	OTHER REPLACEMENT OF CORONARY ARTERY
792C000	REPLACEMENT OF CORONARY ARTERIES USING MULTIPLE METHODS

792Cy00	OTHER SPECIFIED REPLACEMENT OF CORONARY ARTERY
792Cz00	REPLACEMENT OF CORONARY ARTERY NOS
792D.00	OTHER BYPASS OF CORONARY ARTERY
792Dy00	OTHER SPECIFIED OTHER BYPASS OF CORONARY ARTERY
792Dz00	OTHER BYPASS OF CORONARY ARTERY NOS
792E.00	Percutaneous coronary intervention
792y.00	OTHER SPECIFIED OPERATIONS ON CORONARY ARTERY
792z.00	Coronary artery operations NOS
793G.00	Perc translumin balloon angioplasty stenting coronary artery
793G000	Perc translum balloon angioplasty insert 1-2 drug elut stents cor art
793G100	Perc translum balloon angioplasty ins 3 or more drug elut stents cor art
793G200	Perc translum balloon angioplasty insert 1-2 stents cor art
793G300	Percutaneous cor balloon angioplasty 3 more stents cor art NEC
793Gy00	OS perc translum balloon angioplasty stenting coronary art
793Gz00	Perc translum balloon angioplasty stenting coronary art NOS
793K.00	Transluminal operations internal mammary artery side branch
793K000	Transluminal occlusion left internal mammary artery side branch
793Ky00	OS transluminal operations internal mammary art side branch
793Kz00	Transluminal operations internal mammary art side branch NOS
SP00300	MECHANICAL COMPLICATION OF CORONARY BYPASS
ZV45700	[V]Presence of aortocoronary bypass graft
3232.00	ECG: old myocardial infarction
14A3.00	H/O: myocardial infarct <60
14A4.00	H/O: myocardial infarct >60
14AH.00	H/O: Myocardial infarction in last year
14AT.00	History of myocardial infarction

G30..17	Silent myocardial infarction
G32..00	Old myocardial infarction
G32..11	Healed myocardial infarction
G32..12	Personal history of myocardial infarction
G344.00	Silent myocardial ischaemia
8B3k.00	Coronary heart disease medication review
8CMP.00	Coronary heart disease care plan
8CR6.00	Coronary heart disease risk clinical management plan
8I37.00	Coronary heart disease monitoring refused
9Ob..00	Coronary heart disease monitoring administration
9Ob0.00	Attends coronary heart disease monitoring
9Ob1.00	Refuses coronary heart disease monitoring
9Ob2.00	Coronary heart disease monitoring default
9Ob3.00	Coronary heart disease monitoring 1st letter
9Ob4.00	Coronary heart disease monitoring 2nd letter
9Ob5.00	Coronary heart disease monitoring 3rd letter
9Ob6.00	Coronary heart disease monitoring verbal invitation
9Ob7.00	Coronary heart disease monitoring deleted
9Ob8.00	Coronary heart disease monitoring check done
9Ob9.00	Coronary heart disease monitoring telephone invite
G3...11	Arteriosclerotic heart disease
G3...12	Atherosclerotic heart disease
G34..00	Other chronic ischaemic heart disease
G340.00	Coronary atherosclerosis
G340.11	Triple vessel disease of the heart
G340.12	Coronary artery disease

G340000	Single coronary vessel disease
G342.00	Atherosclerotic cardiovascular disease
G343.00	Ischaemic cardiomyopathy
G34y.00	Other specified chronic ischaemic heart disease
G34y000	Chronic coronary insufficiency
G34y100	Chronic myocardial ischaemia
G34yz00	Other specified chronic ischaemic heart disease NOS
G34z.00	Other chronic ischaemic heart disease NOS
G34z000	Asymptomatic coronary heart disease
G39..00	Coronary microvascular disease
3889.00	Euroscore for angina
14A5.00	H/O: angina pectoris
14AJ.00	H/O: angina in last year
187..00	Frequency of angina
388E.00	Canadian Cardiovascular Society classification of angina
388F.00	Cardiovascular Limitations and Symptoms Profile angina score
661M000	Angina self-management plan agreed
661N000	Angina self-management plan review
662K.00	Angina control
662K000	Angina control - good
662K100	Angina control - poor
662K200	Angina control - improving
662K300	Angina control - worsening
662Kz00	Angina control NOS
8B27.00	Antianginal therapy
8IEY.00	Referral to Angina Plan self-management programme declined

8T04.00	Referral to Angina Plan self-management programme
G33..00	Angina pectoris
G331.11	Variant angina pectoris
G33z.00	Angina pectoris NOS
G33z000	Status anginosus
G33z100	Stenocardia
G33z200	Syncope anginosa
G33z300	Angina on effort
G33z400	Ischaemic chest pain
G33z700	Stable angina
G33zz00	Angina pectoris NOS
Gyu3000	[X]Other forms of angina pectoris
J421.11	Angina - abdominal
ZR37.00	Canadian Cardiovascular Society classification of angina
ZR3P.00	CLASP angina score
ZR3P.11	CLASP angina score
ZRB1.00	Euroscore for angina
Ischaemic stroke/TIA	
G63..11	Infarction - precerebral
G632.00	Vertebral artery occlusion
G633.00	Multiple and bilateral precerebral arterial occlus
G63y000	Cerebral infarct due to thrombosis of precerebral arteries
G63y100	Cerebral infarction due to embolism of precerebral arteries
G64..00	Cerebral arterial occlusion
G64..11	CVA - cerebral artery occlusion
G64..12	Infarction - cerebral

G64..13	Stroke due to cerebral arterial occlusion
G640.00	Cerebral thrombosis
G640000	Cerebral infarction due to thrombosis of cerebral
G64z.00	Cerebral infarction NOS
G64z.11	Brainstem infarction NOS
G64z.12	Cerebellar infarction
G64z000	Brainstem infarction
G64z100	Wallenberg syndrome
G64z200	Left sided cerebral infarction
G64z300	Right sided cerebral infarction
G64z400	Infarction of basal ganglia
G671000	Acute cerebrovascular insufficiency NOS
G677000	Occlusion and stenosis of middle cerebral artery
G677100	Occlusion and stenosis of anterior cerebral artery
G677200	Occlusion and stenosis of posterior cerebral arter
G677300	Occlusion and stenosis of cerebellar arteries
G677400	Occlusion and stenosis of multiple and bilat cerebral
G6W..00	Cereb infarct due unsp occlus/stenos precerebr art
G6W..00	Cereb infarct due unsp occlus/stenos precerebr arteries
G6X..00	Cereb infarct due/unspcf occlusn or sten/cerebr
G6X..00	Cereb infarct due/unspcf occlusn or sten/cerebrl artr
Gyu6300	[X]Cereb infarct due/unspcf occlusn or sten/cerebrl artr
Gyu6400	[X]Other cerebral infarction
Gyu6600	[X]Occlusion and stenosis of other cerebral arteries
Gyu6G00	[X]Cereb infarct due unsp occlus/stenos precerebr arteries
14AB.00	H/O: TIA

1JK..00	Suspected transient ischaemic attack
8CRB.00	Transient ischaemic attack clinical management plan
8HBJ.00	Stroke / transient ischaemic attack referral
9Om..00	Stroke/transient ischaemic attack monitoring administration
9Om0.00	Stroke/transient ischaemic attack monitoring first letter
9Om1.00	Stroke/transient ischaemic attack monitoring second letter
9Om2.00	Stroke/transient ischaemic attack monitoring third letter
9Om3.00	Stroke/transient ischaemic attack monitoring verbal invitati
9Om4.00	Stroke/transient ischaemic attack monitoring telephone invte
F580200	Transient ischaemic deafness
ZV12D00	[V]Personal history of transient ischaemic attack
G65..00	Transient cerebral ischaemia
G65..11	Drop attack
G65..12	Transient ischaemic attack
G65..13	Vertebro-basilar insufficiency
G650.00	Basilar artery syndrome
G650.11	Insufficiency - basilar artery
G651.00	Vertebral artery syndrome
G651000	Vertebro-basilar artery syndrome
G652.00	Subclavian steal syndrome
G653.00	Carotid artery syndrome hemispheric
G654.00	Multiple and bilateral precerebral artery syndromes
G655.00	Transient global amnesia
G656.00	Vertebrobasilar insufficiency

G657.00	Carotid territory transient ischaemic attack
G65y.00	Other transient cerebral ischaemia
G65z.00	Transient cerebral ischaemia NOS
G65z000	Impending cerebral ischaemia
G65z100	Intermittent cerebral ischaemia
G65zz00	Transient cerebral ischaemia NOS
14AB000	H/O amaurosis fugax
F423300	Retinal microembolism
F423400	Hollenhorst plaque
F423500	Retinal partial arterial occlusion NOS
F423600	Amaurosis fugax
F423700	Retinal transient arterial occlusion NOS
PAD	
66f3.00	Aortic aneurysm monitoring
68B5100	Aortic aneurysm screening abnormal
7A11.00	Replacement of aneurysmal bifurcation of aorta
7A11000	Emerg repl aneurysm bifurc aorta by anast aorta to fem art
7A11100	Replace aneurysm bifurc aorta by anast aorta to femoral art
7A11200	Emerg repl aneurysm bifurc aorta by anast aorta to iliac a
7A11211	Y graft of abdominal aortic aneurysm (emergency)
7A11300	Replace aneurysm bifurc aorta by anast aorta to iliac artery
7A11311	Y graft abdominal aortic aneurysm
7A11y00	Replacement of aneurysmal bifurcation of aorta OS
7A11z00	Replacement of aneurysmal bifurcation of aorta NOS
7A13.11	Emergency repair of aortic aneurysm
7A13400	Emerg replace aneurysm abdom aorta by anast aorta/aorta NEC

7A13411	Tube graft abdominal aortic aneurysm (emergency)
7A14.11	Aortic aneurysm repair
7A14400	Replace aneurysm abdominal aorta by anast aorta to aorta NEC
7A14411	Tube graft of abdominal aortic aneurysm
7A1B000	Endovascular stenting infrarenal abdominal aortic aneurysm
7A1B100	Endovascular stenting of suprarenal aortic aneurysm
7A1B600	Endovascular stenting for aortic aneurysm of bifurcation NEC
7A1B800	Endovascul insert stent infrarenal abdominal aortic aneurysm
7A1B900	Endovascular insertion stent for suprarenal aortic aneurysm
7A1BA00	Endovascular insertion of stent for thoracic aortic aneurysm
7A1BC00	Endovas insert stent for aortic aneurysm of bifurcation NEC
7A1C000	Endovas ins stent graft for infrarenal abdom aortic aneurysm
7A1C100	Endovas insert of stent graft for suprarenal aortic aneurysm
7A1C200	Endov insertion of stent graft for thoracic aortic aneurysm
G71..00	Aortic aneurysm
G713.00	Abdominal aortic aneurysm which has ruptured
G713.11	Ruptured abdominal aortic aneurysm
G713000	Ruptured suprarenal aortic aneurysm
G714.00	Abdominal aortic aneurysm without mention of rupture
G714.11	AAA - Abdominal aortic aneurysm without mention of rupture
G714000	Juxtarenal aortic aneurysm
G714200	Infrarenal abdominal aortic aneurysm
G714300	Aneurysm of suprarenal aorta
G715.00	Ruptured aortic aneurysm NOS
G715000	Thoracoabdominal aortic aneurysm, ruptured
G716.00	Aortic aneurysm without mention of rupture NOS

G716000	Thoracoabdominal aortic aneurysm, without mention of rupture
G718.00	Leaking abdominal aortic aneurysm
G71z.00	Aortic aneurysm NOS
Gyu7100	[X]Aortic aneurysm of unspecified site, ruptured
Gyu7200	[X]Aortic aneurysm of unspecified site, nonruptured
7A20000	Replacement of carotid artery using graft
7A20100	Intracranial bypass to carotid artery
7A20200	Bypass to carotid artery NEC
7A20300	Endarterectomy and patch repair of carotid artery
7A20311	Carotid endarterectomy and patch
7A20400	Endarterectomy of carotid artery NEC
7A20500	High-flow inter extrac intrac byp ext carot art mid cer art
7A20600	Byp carot art anastom superfic tempor artery middle cere art
7A20700	Intracranial bypass from carotid artery NEC
7A20y00	Other specified reconstruction of carotid artery
7A20z00	Reconstruction of carotid artery NOS
7A21.00	Other open operations on carotid artery
7A21000	Repair of carotid artery NEC
7A21100	Ligation of carotid artery
7A22.00	Transluminal operations on carotid artery
7A22000	Percutaneous transluminal angioplasty of carotid artery
7A22200	Endovascular repair of carotid artery
7A22300	Percutaneous transluminal insertion stent carotid artery
7A22y00	Other specified transluminal operation on carotid artery
7A22z00	Transluminal operation on carotid artery NOS
G630.00	Basilar artery occlusion

G631.00	Carotid artery occlusion
G631.11	Stenosis, carotid artery
G631.12	Thrombosis, carotid artery
G634.00	Carotid artery stenosis
G63y.00	Other precerebral artery occlusion
G63z.00	Precerebral artery occlusion NOS
G653.00	Carotid artery syndrome hemispheric
G670.00	Cerebral atherosclerosis
G670.11	Precerebral atherosclerosis
G677.00	Occlusion/stenosis cerebral arts not result cerebral infarct
G70y000	Carotid artery atherosclerosis
G70y000	Carotid artery atherosclerosis
G70y011	Carotid artery disease
G70y011	Carotid artery disease
Gyu6500	[X]Occlusion and stenosis of other precerebral arteries
SP01200	Mechanical complication of carotid artery bypass
14NB.00	H/O: Peripheral vascular disease procedure
662U.00	Peripheral vascular disease monitoring
9m1..00	Peripheral vascular disease monitoring invitation
9N4h.00	DNA - Did not attend peripheral vascular disease c
G63..00	Precerebral arterial occlusion
G63..12	Stenosis of precerebral arteries
G70..00	Atherosclerosis
G70..11	Arteriosclerosis
G700.00	Aortic atherosclerosis
G700.11	Aorto-iliac disease

G702.00	Extremity artery atheroma
G702000	Monckeberg's medial sclerosis
G70z.00	Arteriosclerotic vascular disease NOS
G73..00	Other peripheral vascular disease
G73..11	Peripheral ischaemic vascular disease
G73..12	Ischaemia of legs
G73..13	Peripheral ischaemia
G733.00	Ischaemic foot
G734.00	Peripheral arterial disease
G73y.00	Other specified peripheral vascular disease
G73yz00	Other specified peripheral vascular disease NOS
G73z.00	Peripheral vascular disease NOS
G73z000	Intermittent claudication
G73z011	Claudication
G73z012	Vascular claudication
G73zz00	Peripheral vascular disease NOS
G784.00	Occlusion of artery of lower limb
G784000	Occlusion of dorsalis pedis artery
G784100	Occlusion of anterior tibial artery
G784200	Occlusion of posterior tibial artery
Gyu7400	[X]Other specified peripheral vascular diseases
Non-ASCVD	
T2DM	
66A3.00	Diabetic on diet only
66A4.00	Diabetic on oral treatment
66Ao.00	Diabetes type 2 review

66At100	Type II diabetic dietary review
66At111	Type 2 diabetic dietary review
C100100	Diabetes mellitus, adult onset, no mention of comp
C100111	Maturity onset diabetes
C100112	Non-insulin dependent diabetes mellitus
C101100	Diabetes mellitus, adult onset, with ketoacidosis
C102.00	Diabetes mellitus with hyperosmolar coma
C102100	Diabetes mellitus, adult onset, with hyperosmolar
C103100	Diabetes mellitus, adult onset, with ketoacidotic
C105100	Diabetes mellitus, adult onset, + ophthalmic manif
C106100	Diabetes mellitus, adult onset, + neurological man
C107100	Diabetes mellitus, adult, + peripheral circulatory
C107200	Diabetes mellitus, adult with gangrene
C109.00	Non-insulin dependent diabetes mellitus
C109.11	NIDDM - Non-insulin dependent diabetes mellitus
C109.12	Type 2 diabetes mellitus
C109.13	Type II diabetes mellitus
C109200	Non-insulin-dependent diabetes mellitus with neuro
C109211	Type II diabetes mellitus with neurological compli
C109212	Type 2 diabetes mellitus with neurological complic
C109300	Non-insulin-dependent diabetes mellitus with multi
C109311	Type II diabetes mellitus with multiple complicati
C109312	Type 2 diabetes mellitus with multiple complicatio
C109400	Non-insulin dependent diabetes mellitus with ulcer
C109411	Type II diabetes mellitus with ulcer
C109412	Type 2 diabetes mellitus with ulcer

C109500	Non-insulin dependent diabetes mellitus with gangr
C109511	Type II diabetes mellitus with gangrene
C109512	Type 2 diabetes mellitus with gangrene
C109700	Non-insulin dependent diabetes mellitus - poor con
C109711	Type II diabetes mellitus - poor control
C109712	Type 2 diabetes mellitus - poor control
C109900	Non-insulin-dependent diabetes mellitus without co
C109911	Type II diabetes mellitus without complication
C109912	Type 2 diabetes mellitus without complication
C109A00	Non-insulin dependent diabetes mellitus with monon
C109A11	Type II diabetes mellitus with mononeuropathy
C109A12	Type 2 diabetes mellitus with mononeuropathy
C109B00	Non-insulin dependent diabetes mellitus with polyn
C109B11	Type II diabetes mellitus with polyneuropathy
C109B12	Type 2 diabetes mellitus with polyneuropathy
C109D00	Non-insulin dependent diabetes mellitus with hypog
C109D11	Type II diabetes mellitus with hypoglycaemic coma
C109D12	Type 2 diabetes mellitus with hypoglycaemic coma
C109E00	Non-insulin depend diabetes mellitus with diabetic
C109E11	Type II diabetes mellitus with diabetic cataract
C109E12	Type 2 diabetes mellitus with diabetic cataract
C109F11	Type II diabetes mellitus with peripheral angiopat
C109F12	Type 2 diabetes mellitus with peripheral angiopath
C109G00	Non-insulin dependent diabetes mellitus with arthr
C109G11	Type II diabetes mellitus with arthropathy
C109G12	Type 2 diabetes mellitus with arthropathy

C109H11	Type II diabetes mellitus with neuropathic arthrop
C109H12	Type 2 diabetes mellitus with neuropathic arthrop
C109J00	Insulin treated Type 2 diabetes mellitus
C109J11	Insulin treated non-insulin dependent diabetes mel
C109J12	Insulin treated Type II diabetes mellitus
C109K00	Hyperosmolar non-ketotic state in type 2 diabetes
C10C.00	Diabetes mellitus autosomal dominant
C10C.11	Maturity onset diabetes in youth
C10D.00	Diabetes mellitus autosomal dominant type 2
C10D.11	Maturity onset diabetes in youth type 2
C10F.00	Type 2 diabetes mellitus
C10F.11	Type II diabetes mellitus
C10F200	Type 2 diabetes mellitus with neurological complic
C10F211	Type II diabetes mellitus with neurological compli
C10F300	Type 2 diabetes mellitus with multiple complicatio
C10F311	Type II diabetes mellitus with multiple complicati
C10F400	Type 2 diabetes mellitus with ulcer
C10F411	Type II diabetes mellitus with ulcer
C10F500	Type 2 diabetes mellitus with gangrene
C10F511	Type II diabetes mellitus with gangrene
C10F700	Type 2 diabetes mellitus - poor control
C10F711	Type II diabetes mellitus - poor control
C10F900	Type 2 diabetes mellitus without complication
C10F911	Type II diabetes mellitus without complication
C10FA00	Type 2 diabetes mellitus with mononeuropathy
C10FA11	Type II diabetes mellitus with mononeuropathy

C10FB00	Type 2 diabetes mellitus with polyneuropathy
C10FB11	Type II diabetes mellitus with polyneuropathy
C10FD00	Type 2 diabetes mellitus with hypoglycaemic coma
C10FD11	Type II diabetes mellitus with hypoglycaemic coma
C10FE00	Type 2 diabetes mellitus with diabetic cataract
C10FE11	Type II diabetes mellitus with diabetic cataract
C10FF00	Type 2 diabetes mellitus with peripheral angiopath
C10FF11	Type II diabetes mellitus with peripheral angiopat
C10FG00	Type 2 diabetes mellitus with arthropathy
C10FG11	Type II diabetes mellitus with arthropathy
C10FH00	Type 2 diabetes mellitus with neuropathic arthrop
C10FH11	Type II diabetes mellitus with neuropathic arthrop
C10FJ00	Insulin treated Type 2 diabetes mellitus
C10FJ11	Insulin treated Type II diabetes mellitus
C10FK00	Hyperosmolar non-ketotic state in type 2 diabetes
C10FK11	Hyperosmolar non-ketotic state in type II diabetes
C10FN00	Type 2 diabetes mellitus with ketoacidosis
C10FN11	Type II diabetes mellitus with ketoacidosis
C10FP00	Type 2 diabetes mellitus with ketoacidotic coma
C10FP11	Type II diabetes mellitus with ketoacidotic coma
C10FR00	Type 2 diabetes mellitus with gastroparesis
C10FR11	Type II diabetes mellitus with gastroparesis
C10FS00	Maternally inherited diabetes mellitus
C10N.00	Secondary diabetes mellitus
C10N000	Secondary diabetes mellitus without complication
C10y100	Diabetes mellitus, adult, + other specified manife

C10z100	Diabetes mellitus, adult onset, + unspecified comp
L180600	Pre-existing diabetes mellitus, non-insulin-depend
C104100	Diabetes mellitus, adult onset, with renal manifes
C109000	Non-insulin-dependent diabetes mellitus with renal
C109011	Type II diabetes mellitus with renal complications
C109012	Type 2 diabetes mellitus with renal complications
C109C00	Non-insulin dependent diabetes mellitus with nephr
C109C11	Type II diabetes mellitus with nephropathy
C109C12	Type 2 diabetes mellitus with nephropathy
C10F000	Type 2 diabetes mellitus with renal complications
C10F011	Type II diabetes mellitus with renal complications
C10FC00	Type 2 diabetes mellitus with nephropathy
C10FC11	Type II diabetes mellitus with nephropathy
C10FL00	Type 2 diabetes mellitus with persistent proteinur
C10FL11	Type II diabetes mellitus with persistent proteinu
C10FM00	Type 2 diabetes mellitus with persistent microalbu
C10FM11	Type II diabetes mellitus with persistent microalb
C109100	Non-insulin-dependent diabetes mellitus with ophth
C109111	Type II diabetes mellitus with ophthalmic complica
C109112	Type 2 diabetes mellitus with ophthalmic complicat
C109600	Non-insulin-dependent diabetes mellitus with retin
C109611	Type II diabetes mellitus with retinopathy
C109612	Type 2 diabetes mellitus with retinopathy
C10F100	Type 2 diabetes mellitus with ophthalmic complicat
C10F111	Type II diabetes mellitus with ophthalmic complica
C10F600	Type 2 diabetes mellitus with retinopathy

C10F611	Type II diabetes mellitus with retinopathy
C10FQ00	Type 2 diabetes mellitus with exudative maculopath
C10FQ11	Type II diabetes mellitus with exudative maculopat
T1DM	
66An.00	Diabetes type 1 review
66At000	Type I diabetic dietary review
66At011	Type 1 diabetic dietary review
66AV.00	Diabetic on insulin and oral treatment
C100000	Diabetes mellitus, juvenile type, no mention of co
C100011	Insulin dependent diabetes mellitus
C101000	Diabetes mellitus, juvenile type, with ketoacidosi
C102000	Diabetes mellitus, juvenile type, with hyperosmola
C103000	Diabetes mellitus, juvenile type, with ketoacidoti
C105000	Diabetes mellitus, juvenile type, + ophthalmic man
C106000	Diabetes mellitus, juvenile, + neurological manife
C107000	Diabetes mellitus, juvenile +peripheral circulator
C108.00	Insulin dependent diabetes mellitus
C108.11	IDDM-Insulin dependent diabetes mellitus
C108.12	Type 1 diabetes mellitus
C108.13	Type I diabetes mellitus
C108200	Insulin-dependent diabetes mellitus with neurologi
C108211	Type I diabetes mellitus with neurological complic
C108212	Type 1 diabetes mellitus with neurological complic
C108300	Insulin dependent diabetes mellitus with multiple
C108311	Type I diabetes mellitus with multiple complicatio
C108312	Type 1 diabetes mellitus with multiple complicatio

C108400	Unstable insulin dependent diabetes mellitus
C108411	Unstable type I diabetes mellitus
C108412	Unstable type 1 diabetes mellitus
C108500	Insulin dependent diabetes mellitus with ulcer
C108511	Type I diabetes mellitus with ulcer
C108512	Type 1 diabetes mellitus with ulcer
C108600	Insulin dependent diabetes mellitus with gangrene
C108611	Type I diabetes mellitus with gangrene
C108612	Type 1 diabetes mellitus with gangrene
C108800	Insulin dependent diabetes mellitus - poor control
C108811	Type I diabetes mellitus - poor control
C108812	Type 1 diabetes mellitus - poor control
C108900	Insulin dependent diabetes maturity onset
C108911	Type I diabetes mellitus maturity onset
C108912	Type 1 diabetes mellitus maturity onset
C108A00	Insulin-dependent diabetes without complication
C108A11	Type I diabetes mellitus without complication
C108A12	Type 1 diabetes mellitus without complication
C108B00	Insulin dependent diabetes mellitus with mononeuro
C108B11	Type I diabetes mellitus with mononeuropathy
C108B12	Type 1 diabetes mellitus with mononeuropathy
C108C00	Insulin dependent diabetes mellitus with polyneuro
C108C11	Type I diabetes mellitus with polyneuropathy
C108C12	Type 1 diabetes mellitus with polyneuropathy
C108E00	Insulin dependent diabetes mellitus with hypoglyca
C108E11	Type I diabetes mellitus with hypoglycaemic coma

C108E12	Type 1 diabetes mellitus with hypoglycaemic coma
C108F00	Insulin dependent diabetes mellitus with diabetic
C108F11	Type I diabetes mellitus with diabetic cataract
C108F12	Type 1 diabetes mellitus with diabetic cataract
C108G11	Type I diabetes mellitus with peripheral angiopath
C108G12	Type 1 diabetes mellitus with peripheral angiopath
C108H00	Insulin dependent diabetes mellitus with arthropat
C108H11	Type I diabetes mellitus with arthropathy
C108H12	Type 1 diabetes mellitus with arthropathy
C108J11	Type I diabetes mellitus with neuropathic arthropa
C108J12	Type 1 diabetes mellitus with neuropathic arthropa
C10C.12	Maturity onset diabetes in youth type 1
C10E.00	Type 1 diabetes mellitus
C10E.11	Type I diabetes mellitus
C10E.12	Insulin dependent diabetes mellitus
C10E200	Type 1 diabetes mellitus with neurological complic
C10E211	Type I diabetes mellitus with neurological complic
C10E212	Insulin-dependent diabetes mellitus with neurologi
C10E300	Type 1 diabetes mellitus with multiple complicatio
C10E311	Type I diabetes mellitus with multiple complicatio
C10E312	Insulin dependent diabetes mellitus with multiple
C10E400	Unstable type 1 diabetes mellitus
C10E411	Unstable type I diabetes mellitus
C10E412	Unstable insulin dependent diabetes mellitus
C10E500	Type 1 diabetes mellitus with ulcer
C10E511	Type I diabetes mellitus with ulcer

C10E512	Insulin dependent diabetes mellitus with ulcer
C10E600	Type 1 diabetes mellitus with gangrene
C10E611	Type I diabetes mellitus with gangrene
C10E612	Insulin dependent diabetes mellitus with gangrene
C10E800	Type 1 diabetes mellitus - poor control
C10E811	Type I diabetes mellitus - poor control
C10E812	Insulin dependent diabetes mellitus - poor control
C10E900	Type 1 diabetes mellitus maturity onset
C10E911	Type I diabetes mellitus maturity onset
C10E912	Insulin dependent diabetes maturity onset
C10EA00	Type 1 diabetes mellitus without complication
C10EA11	Type I diabetes mellitus without complication
C10EA12	Insulin-dependent diabetes without complication
C10EB00	Type 1 diabetes mellitus with mononeuropathy
C10EB11	Type I diabetes mellitus with mononeuropathy
C10EB12	Insulin dependent diabetes mellitus with mononeuro
C10EC00	Type 1 diabetes mellitus with polyneuropathy
C10EC11	Type I diabetes mellitus with polyneuropathy
C10EC12	Insulin dependent diabetes mellitus with polyneuro
C10EE00	Type 1 diabetes mellitus with hypoglycaemic coma
C10EE11	Type I diabetes mellitus with hypoglycaemic coma
C10EE12	Insulin dependent diabetes mellitus with hypoglyca
C10EF00	Type 1 diabetes mellitus with diabetic cataract
C10EF11	Type I diabetes mellitus with diabetic cataract
C10EF12	Insulin dependent diabetes mellitus with diabetic
C10EG00	Type 1 diabetes mellitus with peripheral angiopath

C10EG11	Type I diabetes mellitus with peripheral angiopath
C10EH00	Type 1 diabetes mellitus with arthropathy
C10EH11	Type I diabetes mellitus with arthropathy
C10EH12	Insulin dependent diabetes mellitus with arthropat
C10EJ00	Type 1 diabetes mellitus with neuropathic arthropa
C10EJ11	Type I diabetes mellitus with neuropathic arthropa
C10EK00	Type 1 diabetes mellitus with persistent proteinur
C10EK11	Type I diabetes mellitus with persistent proteinur
C10EL00	Type 1 diabetes mellitus with persistent microalbu
C10EL11	Type I diabetes mellitus with persistent microalbu
C10EM00	Type 1 diabetes mellitus with ketoacidosis
C10EM11	Type I diabetes mellitus with ketoacidosis
C10EN00	Type 1 diabetes mellitus with ketoacidotic coma
C10EN11	Type I diabetes mellitus with ketoacidotic coma
C10EQ00	Type 1 diabetes mellitus with gastroparesis
C10EQ11	Type I diabetes mellitus with gastroparesis
C10y000	Diabetes mellitus, juvenile, + other specified man
C10z000	Diabetes mellitus, juvenile type, + unspecified co
L180500	Pre-existing diabetes mellitus, insulin-dependent
C104000	Diabetes mellitus, juvenile type, with renal manif
C108000	Insulin-dependent diabetes mellitus with renal com
C108011	Type I diabetes mellitus with renal complications
C108012	Type 1 diabetes mellitus with renal complications
C108D00	Insulin dependent diabetes mellitus with nephropat
C108D11	Type I diabetes mellitus with nephropathy
C108D12	Type 1 diabetes mellitus with nephropathy

C10E000	Type 1 diabetes mellitus with renal complications
C10E011	Type I diabetes mellitus with renal complications
C10E012	Insulin-dependent diabetes mellitus with renal com
C10ED00	Type 1 diabetes mellitus with nephropathy
C10ED11	Type I diabetes mellitus with nephropathy
C10ED12	Insulin dependent diabetes mellitus with nephropat
C108100	Insulin-dependent diabetes mellitus with ophthalmi
C108111	Type I diabetes mellitus with ophthalmic complicat
C108112	Type 1 diabetes mellitus with ophthalmic complicat
C108700	Insulin dependent diabetes mellitus with retinopat
C108711	Type I diabetes mellitus with retinopathy
C108712	Type 1 diabetes mellitus with retinopathy
C10E100	Type 1 diabetes mellitus with ophthalmic complicat
C10E111	Type I diabetes mellitus with ophthalmic complicat
C10E112	Insulin-dependent diabetes mellitus with ophthalmi
C10E700	Type 1 diabetes mellitus with retinopathy
C10E711	Type I diabetes mellitus with retinopathy
C10E712	Insulin dependent diabetes mellitus with retinopat
C10EP00	Type 1 diabetes mellitus with exudative maculopath
C10EP11	Type I diabetes mellitus with exudative maculopath
CKD	
1Z12.00	Chronic kidney disease stage 3
1Z15.00	Chronic kidney disease stage 3A
1Z16.00	Chronic kidney disease stage 3B
1Z1B.00	Chronic kidney disease stage 3 with proteinuria
1Z1B.11	CKD stage 3 with proteinuria

1Z1C.00	Chronic kidney disease stage 3 without proteinuria
1Z1C.11	CKD stage 3 without proteinuria
1Z1D.00	Chronic kidney disease stage 3A with proteinuria
1Z1D.11	CKD stage 3A with proteinuria
1Z1E.00	Chronic kidney disease stage 3A without proteinuria
1Z1E.11	CKD stage 3A without proteinuria
1Z1F.00	Chronic kidney disease stage 3B with proteinuria
1Z1F.11	CKD stage 3B with proteinuria
1Z1G.00	Chronic kidney disease stage 3B without proteinuria
1Z1G.11	CKD stage 3B without proteinuria
K053.00	Chronic kidney disease stage 3
1Z1H.00	Chronic kidney disease stage 4 with proteinuria
1Z1H.11	CKD stage 4 with proteinuria
1Z1J.00	Chronic kidney disease stage 4 without proteinuria
1Z1J.11	CKD stage 4 without proteinuria
K054.00	Chronic kidney disease stage 4
1Z1K.00	Chronic kidney disease stage 5 with proteinuria
1Z1K.11	CKD stage 5 with proteinuria
1Z1L.00	Chronic kidney disease stage 5 without proteinuria
1Z1L.11	CKD stage 5 without proteinuria
7L1A.11	Dialysis for renal failure
7L1A000	Renal dialysis
7L1A100	Peritoneal dialysis
7L1A200	Haemodialysis NEC
7L1A400	Automated peritoneal dialysis
7L1A500	Continuous ambulatory peritoneal dialysis

7L1A600	Peritoneal dialysis NEC
K055.00	Chronic kidney disease stage 5
SP06B00	Continuous ambulatory peritoneal dialysis associated perit
SP0E.00	Disorders associated with peritoneal dialysis
K05..12	End stage renal failure
K050.00	End stage renal failure

ACS, acute coronary syndrome; ASCVD, atherosclerotic cardiovascular disease; CHD, coronary heart disease; CKD, chronic kidney disease; PAD, peripheral arterial disease; T1DM, type 1 diabetes mellitus; T2DM, type 2 diabetes mellitus

SUPPLEMENTAL TABLE S2. Categorisation of Lipid Modifying Therapy (LMT)

High-intensity statin	Atorvastatin 20, 40, and 80 mg; rosuvastatin 10, 20, and 40 mg; simvastatin 80 mg
Medium-intensity statin	Atorvastatin 10 mg; rosuvastatin 5 mg; simvastatin 20 and 40 mg; fluvastatin 80 mg
Low-intensity statin	Simvastatin 10 mg; pravastatin 10, 20, and 40 mg; fluvastatin 20 and 40 mg
Nonstatin LMT	Ezetimibe, nicotinic acid (niacin, acipimox), fibrates (benzafibrate, ciprofibrate, fenofibrate, and gemfibrozil), bile acid sequestrants (cholestyramine, colesevelam, and colestipol)

SUPPLEMENTAL TABLE S3. Baseline Characteristics for the Overall ASCVD Cohort and Prevalent Subgroups

	Recent ACS (n = 3112)	Other CHD (n = 60 347)	Ischaemic stroke / TIA (n = 26 146)	PAD (n = 19 830)	Total ASCVD (n = 91 479)
Demographic characteristics					
Age, mean, years (SD)	67.8 (12.8)	72.6 (10.6)	73.9 (11.5)	73.5 (10.3)	72.6 (10.9)
Male, %	66.5	63.7	52.3	65.4	60.7
Social deprivation index*, mean (SD)	2.7 (1.4)	2.7 (1.4)	2.6 (1.4)	2.8 (1.4)	2.7 (1.4)
Ethnicity, %					
White	28.3	30.3	29.5	30.6	30.0
South Asian†	15.1	14.0	13.8	12.9	13.9
Black Caribbean / African	0.3	0.3	0.5	0.4	0.3
Chinese	0.0	0.1	0.1	0.1	0.1
Not recorded	56.4	55.4	56.1	56.1	55.8
Current smoker, %	15.2	12.1	13.5	26.6	14.1
BMI, mean, kg/m ² (SD)	28.4 (5.4)	28.5 (5.3)	27.8 (5.4)	27.7 (5.3)	28.3 (5.4)
Systolic BP, mean (SD)	128.9 (17.8)	131.4 (15.8)	132.8 (16.0)	133.5 (16.4)	132.1 (15.9)
Baseline clinical characteristics					
Recent ACS, %	100.0	3.3	0.9	1.6	3.4
Other CHD, %	64.2	100.0	24.0	34.0	66.0
Ischaemic stroke / TIA, %	7.6	10.4	100.0	21.5	28.6
PAD, %	10.1	11.2	16.3	100.0	21.7
DM, %	27.0	30.0	27.3	34.5	29.4
Hypertension, %	50.4	61.2	64.0	66.7	61.5
History of CHF, %	14.0	11.3	6.9	8.9	9.1
CKD stage III	17.2	24.4	22.1	23.0	23.5
CKD stage IV- V‡	0.2	0.3	0.2	0.4	0.2

Concomitant medication use[¶]					
Beta-blockers, %	81.4	60.1	23.5	22.4	48.7
ACEI/ARBs, %	85.0	65.3	52.1	52.4	61.7
Antiplatelets, [#] %	52.5	13.5	29.7	15.4	18.5

* Social deprivation index is defined by Townsend deprivation index score, 1 = most affluent and 5 = least affluent;

† Includes Indian, Pakistani, Bangladeshi, and other South Asian individuals; ‡ Stage V CKD includes end-stage renal disease and dialysis. ¶ Medication use on index date. # Clopidogrel/ticagrelor/prasugrel

ACEI, angiotensin converting enzyme inhibitor; ACS, acute coronary syndrome; ARB, angiotensin II receptor blocker; ASCVD, atherosclerotic cardiovascular disease; BMI, body-mass index; BP, blood pressure; CHD, coronary heart disease; CHF, congestive heart failure; CKD, chronic kidney disease; DM, diabetes mellitus; PAD, peripheral arterial disease; SD, standard deviation; TIA, transient ischaemic attack

SUPPLEMENTAL TABLE S4. Use of LMT in the Overall ASCVD Cohort and Prevalent Subgroups

	Recent ACS (n = 3112)	Other CHD (n = 60 347)	Ischaemic stroke / TIA (n = 26 146)	PAD (n = 19 830)	Total ASCVD (n = 91 479)
High-intensity statin, %	62.4	35.5	24.7	30.2	31.4
Monotherapy, %	93.3	91.9	92.6	91.1	92.2
Plus Ezetimibe, %	1.0	4.5	3.5	4.7	4.1
Plus other nonstatin LMT, %	5.8	3.5	3.9	4.2	3.7
Medium-intensity statin, %	22.6	40.7	44.8	42.8	42.1
Monotherapy, %	98.6	97.9	98.4	98.4	98.2
Plus Ezetimibe, %	0.6	1.2	0.9	0.8	1.0
Plus other nonstatin LMT, %	0.9	0.9	0.7	0.8	0.8
Low-intensity statin, %	2.1	5.7	5.8	5.4	5.6
Monotherapy, %	93.8	95.8	96.6	96.3	96.3
Plus Ezetimibe, %	6.3	3.3	2.6	3.0	2.8
Plus other nonstatin LMT, %	0.0	0.9	0.9	0.7	0.8
Nonstatins only, %	0.9	2.0	1.8	1.9	1.9
Ezetimibe, monotherapy, %	70.4	61.5	65.4	60.1	61.6
Other nonstatin LMT, %	29.6	38.5	34.6	39.9	38.4
Not currently treated by LMT, %	12.1	16.0	22.9	19.7	19.0
Previously on high-intensity statin, %	20.7	16.7	10.1	12.7	13.2
Previously on medium-intensity statin, %	22.8	40.5	38.9	36.7	38.4
Previously on low-intensity statin, %	5.6	9.9	7.7	7.6	8.5
Previously on nonstatin LMT, %	4.8	7.2	5.6	5.7	5.9
No previous LMT, %	46.1	25.7	37.7	37.3	34.0

Numbers in the grey bars denote absolute percentages, and add up to 100% vertically. Numbers in the white bars are relative percentages of the absolute percentages in the grey bars.

ACS, acute coronary syndrome; ASCVD, atherosclerotic cardiovascular disease; CHD, coronary heart disease; LMT, lipid modifying therapy; PAD, peripheral arterial disease; TIA, transient ischaemic attack

SUPPLEMENTAL TABLE S5. Lipid Level Achievement by LMT in the Overall ASCVD Cohort and Prevalent Subgroups

	Recent ACS (n = 3112)	Other CHD (n = 58 348)	Ischaemic stroke / TIA (n = 19 785)	PAD (n = 10 234)	Total ASCVD (n = 91 479)
Mean LDL-C, mmol/L					
High-intensity statin	1.8	2.1	2.1	2.1	2.1
Medium-intensity statin	2.0	2.0	2.0	2.1	2.0
Low-intensity statin	2.5	2.3	2.4	2.4	2.3
Nonstatin LMT only	3.0	3.0	3.0	3.0	3.0
No current LMT	2.9	3.1	3.1	3.1	3.1
Total	2.0	2.2	2.3	2.4	2.3
LDL-C <1.8 mmol/L, %					
High-intensity statin	52.6	36.8	35.1	33.2	37.3
Medium-intensity statin	38.7	38.2	37.8	35.1	37.8
Low-intensity statin	23.4	23.6	21.4	21.5	22.9
Nonstatin LMT only	11.1	6.3	4.7	9.2	6.4
No current LMT	14.9	8.7	6.5	7.4	8.0
Total	43.9	31.5	27.9	26.4	30.6
Mean non-HDL-C, mmol/L					
High-intensity statin	2.4	2.8	2.8	2.9	2.8
Medium-intensity statin	2.7	2.6	2.6	2.7	2.6
Low-intensity statin	3.2	2.9	3.0	3.0	2.9
Nonstatin LMT only	3.9	3.7	3.7	3.7	3.7
No current LMT	3.6	3.7	3.8	3.8	3.8
Total	2.6	2.9	3.0	3.1	2.9
Non-HDL-C <2.6 mmol/L, %					
High-intensity statin	64.8	47.2	46.6	42.9	47.9
Medium-intensity statin	50.0	51.8	54.9	48.6	52.1
Low-intensity statin	26.6	37.6	36.6	33.1	36.8
Nonstatin LMT only	7.4	12.3	10.8	14.1	12.1
No current LMT	20.7	14.9	13.8	13.6	14.5
Total	54.8	42.6	41.0	36.9	42.0

ACS, acute coronary syndrome; ASCVD, atherosclerotic cardiovascular disease; CHD, coronary heart disease; HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol; LMT, lipid modifying therapy; PAD, peripheral arterial disease; TIA, transient ischaemic attack

SUPPLEMENTAL TABLE S6. Lipid Level Achievement by LMT in the Overall ASCVD Cohort and Hierarchical Subgroups

	Recent ACS (n = 3112)	Other CHD (n = 60 347)	Ischaemic stroke / TIA (n = 26 146)	PAD (n = 19 830)	Total ASCVD (n = 91 479)
Mean LDL-C, mmol/L					
High-intensity statin	1.8	2.1	2.1	2.1	2.1
Medium-intensity statin	2.0	2.0	2.0	2.0	2.0
Low-intensity statin	2.5	2.3	2.3	2.3	2.3
Nonstatin LMT only	3.0	3.0	3.0	3.0	3.0
No current LMT	2.9	3.1	3.1	3.1	3.1
Total	2.0	2.2	2.3	2.3	2.3
LDL-C <1.8 mmol/L, %					
High-intensity statin	52.6	37.7	36.2	36.6	37.3
Medium-intensity statin	38.7	38.3	38.9	37.3	37.8
Low-intensity statin	23.4	23.5	23.6	22.0	22.9
Nonstatin LMT only	11.1	6.3	5.2	9.4	6.4
No current LMT	14.9	8.9	7.0	8.4	8.0
Total	43.8	32.0	28.4	26.4	30.6
Mean non-HDL-C, mmol/L					
High-intensity statin	2.4	2.7	2.8	2.8	2.8
Medium-intensity statin	2.7	2.6	2.6	2.7	2.6
Low-intensity statin	3.2	2.9	2.9	3.0	2.9
Nonstatin LMT only	3.9	3.7	3.7	3.7	3.7
No current LMT	3.6	3.7	3.8	3.7	3.8
Total	2.6	2.9	3.0	3.0	2.9
Non-HDL-C <2.6 mmol/L, %					
High-intensity statin	64.8	48.2	47.1	45.9	47.9
Medium-intensity statin	50.0	51.8	55.0	51.0	52.1
Low-intensity statin	26.6	37.4	39.5	34.6	36.8
Nonstatin LMT only	7.4	12.3	11.7	14.4	12.1
No current LMT	20.7	15.0	14.3	14.9	14.5
Total	54.5	43.0	41.5	36.9	42.0

ACS, acute coronary syndrome; ASCVD, atherosclerotic cardiovascular disease; CHD, coronary heart disease; HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol; LMT, lipid modifying therapy; PAD, peripheral arterial disease; TIA, transient ischaemic attack

SUPPLEMENTAL TABLE S7. Lipid Level Achievement by LMT in the Overall Non-ASCVD Cohort and Subgroups

	T2DM and QRISK2 >10% with CKD (n = 11 102)	T2DM and QRISK 2 >10% without CKD (n = 52 556)	T1DM and age >40 years with CKD (n = 749)	T1DM and age >40 years without CKD (n = 4204)	CKD without DM criteria (n = 23 475)	Total non- ASCVD (n = 92 086)
Mean LDL-C, mmol/L						
High-intensity statin	2.0	2.1	1.9	2.1	2.2	2.1
Medium-intensity statin	1.9	2.0	1.8	2.0	2.2	2.0
Low-intensity statin	2.1	2.3	2.0	2.3	2.5	2.3
Nonstatin LMT only	2.8	2.9	2.5	2.7	3.1	2.9
No current LMT	2.9	3.0	2.7	2.7	3.3	3.1
Total	2.2	2.4	2.1	2.3	2.8	2.4
LDL-C <1.8 mmol/L, %						
High-intensity statin	41.8	36.7	41.9	36.2	29.9	36.4
Medium-intensity statin	49.9	41.3	52.0	35.3	29.1	39.7
Low-intensity statin	32.5	26.6	45.9	25.1	16.3	25.1
Nonstatin LMT only	11.3	5.9	20.7	8.1	5.2	7.1
No current LMT	10.3	7.5	17.6	11.5	3.7	6.7
Total	35.7	28.4	39.8	25.9	15.7	26.0
Mean non-HDL-C, mmol/L						
High-intensity statin	2.8	2.9	2.6	2.7	2.9	2.9
Medium-intensity statin	2.6	2.7	2.4	2.6	2.8	2.7
Low-intensity statin	2.9	3.0	2.6	2.9	3.1	3.0
Nonstatin LMT only	3.5	3.8	3.2	3.4	3.8	3.7
No current LMT	3.6	3.8	3.3	3.2	3.9	3.8
Total	2.94	3.1	2.7	2.9	3.4	3.2
Non-HDL-C <2.6 mmol/L, %						
High-intensity statin	44.5	40.8	51.4	49.4	39.5	41.8
Medium-intensity statin	57.5	48.9	69.1	57.6	43.2	49.4
Low-intensity statin	42.7	35.2	51.4	43.6	27.0	34.8
Nonstatin LMT only	12.7	8.7	31.0	17.6	8.1	10.1
No current LMT	16.1	12.1	26.8	26.2	8.5	11.9
Total	41.9	34.3	52.0	43.2	24.3	33.2

ASCVD, atherosclerotic cardiovascular disease; CKD, chronic kidney disease; HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol; LMT, lipid modifying therapy; T1DM, type 1 diabetes mellitus; T2DM, type 2 diabetes mellitus