

Section S1

Atherosclerosis Risk in Communities (ARIC): The ARIC cohort study was conducted in four US communities with 15,792 participants aged 45 through 65 at their baseline using probability sampling. Cohort participants were assessed in two examinations three years apart and follow-up interviews annually. The details of the study procedure were available elsewhere (27). While the study is still ongoing, the dementia was first assessed on Exam 5. Hence, we restrict our analysis to the participants assessed as wave 5 (n=5930). All the participants available for our analysis had follow-up period of approximately 8 years (exam 7).

Cardiovascular Health Study (CHS): The CHS cohort study recruited 5,888 adults aged 65 and over from four US communities. Participants of age 65 and older were recruited randomly using a two-step process from the Medicare eligibility lists of the health care financing administration. The cohorts were then followed for a period of three years with semi-annual contacts, alternating telephone calls and clinical assessments. After the initial three years, random samples were selected to produce a cohort with 60:40 female/male ratio in age group: 65-69, 70-74, 75-79 and 80+ age groups. Details of the study participants were described elsewhere (28). The follow-up times varies in CHS datasets according to the outcome types. For MI, stroke and death the follow-up time is 25 years, for diabetes, follow-up time is around 18-20 years and for dementia the follow-up time is the shortest only 5-7 years.

Framingham Heart Study (FHS): The FHS cohort study randomly recruited 5209 adults aged between 30 and 62 in 1948 who are free from arteriosclerotic and hypertensive cardiovascular disease. Over time various diagnosis measured was also obtain to new hypothesis using this cohort. Dementia free original cohorts was determined from 1976-1978 corresponding to wave 15. We restricted our analysis to these participants only (n=3288). Detailed of the study methods can be found here (29).

MRC Cognitive function and Ageing Studies-I (CFAS-I): The CFAS-1 is a large multi-center population based study conducted in six geographically defined areas in England and Wales in 1991 to 1994. Participants were recruited in a two-stage process, with screening followed by diagnostic assessment with a repeat at 2 years. Diagnostics assessment includes geriatric mental assessment. The screening assessment was available for 13004 adults aged 65 and above. In this study, participants were followed up to 17 years. The details study procedure has been described elsewhere (30).

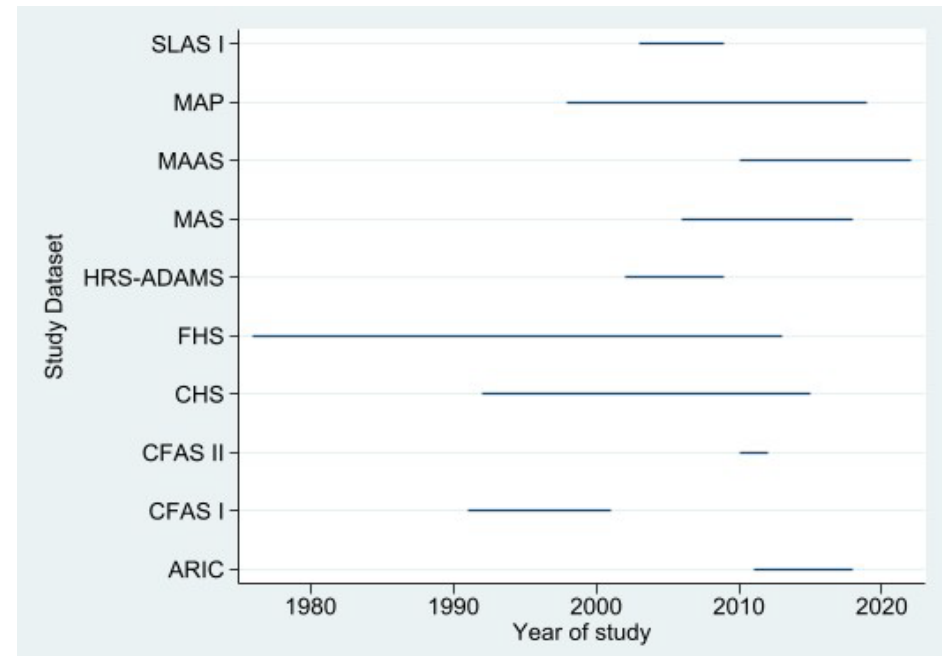


Figure: Timeline of the 10 longitudinal studies considered in DemNCD risk tool

Cognitive function and Ageing Studies-II (CFAS-II): The CFAS-II recruited 7762 participants of aged 65 years and over between 2008 and 2011. Sampling was stratified according to age group 65 to 74 year's vs ≥ 75 years. Participants were followed-up after two years. Further deaths were collected, but only limited in life data (at 10 years, not used in this analysis). See (31) for detailed study procedure.

Sydney Memory and Aging Study (MAS): The MAS study consists of 1037 participants aged 70 to 90 without dementia at baseline (32). The recruitment was conducted randomly in 2005 using electoral roll from two areas of Sydney, Australia. Detailed neuropsychiatric and medical assessments and blood biomarkers were obtained. Participants are followed up with brief telephone reviews annually, and with detailed assessment every two years. A total of 12 years follow-up data are available for our analysis.

Maastricht Aging Study (MAAS): Maastricht longitudinal study comprises four independent panel studies with 1823 healthy adults aged between 24 and 81. The sample was drawn from a patient register of collaborating general practitioners, stratified by age, sex and general ability level. Individuals were followed up for 12 years with repeated assessments of blood pressure, medical history, lifestyle, anthropomorphic and neurocognitive measures at 6 and 12 years. 491 individuals aged 65 and over at baseline are considered for our analysis.

The Health and Retirement Study - Aging, Demographics and Memory Study (HRS ADAMS): The HRS ADAMS is a supplementary study in the HRS that conducted in-person clinical assessments to gather information on cognitive status. The study consisted of 856 community-based individuals aged 70 years and above who were assessed in 2001 (baseline) and followed through to 2008. The mean age of participants at baseline was 81.6 years and 41.5% were males.

The Rush Memory and Aging Project (MAP): The MAP comprised 2,192 participants aged 60 years and older in the greater Chicago area. All participants agreed to an annual detailed clinical evaluation. The study has a rolling recruitment starting in 1997 to present. Up to 22 years of follow-up with an overall follow-up rate of more than 90% were used at the time of these analyses. In this study we excluded 80 participants aged below 65 at baseline. The study was approved by an Institutional Review Board of Rush University Medical Center. All participants signed informed and repository consents.

Singapore Longitudinal Ageing Study-I (SLAS-I): The SLAS consists of 2805 individuals of aged 55 years and above who were Singaporean residents in contiguous precincts in the South East region of Singapore. Invitations to the participants were given by door-to-door census with a very rate of response rate to the study (78.2%). In the current study we have included 1407 individuals of age 65 and over at baseline. Participants were followed-up every 3 years, with a total of 6 years follow-up data are available for our analysis.

Table S1: Definition of each of outcome presented in the paper

Outcome	Definition
Diabetes	Derived variables for diabetes based on WHO guidelines or American Diabetes Association guidelines were available in the CHS based on blood glucose ≥ 200 mg/dl for < 8 hrs fasting ≥ 126 mg/dl for > 8 hours fasting. For ARIC and FHS diabetes variable was calculated based on blood glucose > 140 mg/dl, Self-reported diabetes will be considered in the MAP, CFAS-I and CFAS-II, MAS, SLAS-I, and MAAS. Medical history of diabetes were used for HRS-ADAMS.
Stroke	MAP uses clinical diagnosis of stroke. For the ARIC study, a diagnostic computer algorithm created variable will be used to define stroke. For the CHS cognition study, special cerebrovascular subcommittees defined the criteria for stroke and TIA while in the FHS, stroke cases were reviewed by neurologists. Where clinical diagnosis is not available, for example CFAS-I and CFAS-II, MAS, MAAS, SLAS I and HRS ADAMS self-reported stroke will be used.
MI	Clinical diagnosis of MI was used in FHS. Self-reported history of heart attack were used (ARIC, CHS, CFAS-I, CFAS-II, MAS, MAAS and SLAS I). MI was also defined based on history of heart attack, MI or coronary thrombosis (HRS-ADAMS). In MAP was defined as self-reported history of heart attack, coronary thrombosis, coronary occlusion, or myocardial infarction.
Dementia	All included studies diagnosed dementia through the Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R, IV criteria) or ICD codes. We chose to study all- type dementia instead of specific types for two reasons, one, as there are no tools available to understand the different dementia pathologies to predict dementia types and two, as we intend to build a tool which is simple and facilitates public participation. Algorithms were used for diagnosis of dementia in ARIC and CFAS.
Death	Date/year of death or age at death are available in all studies.

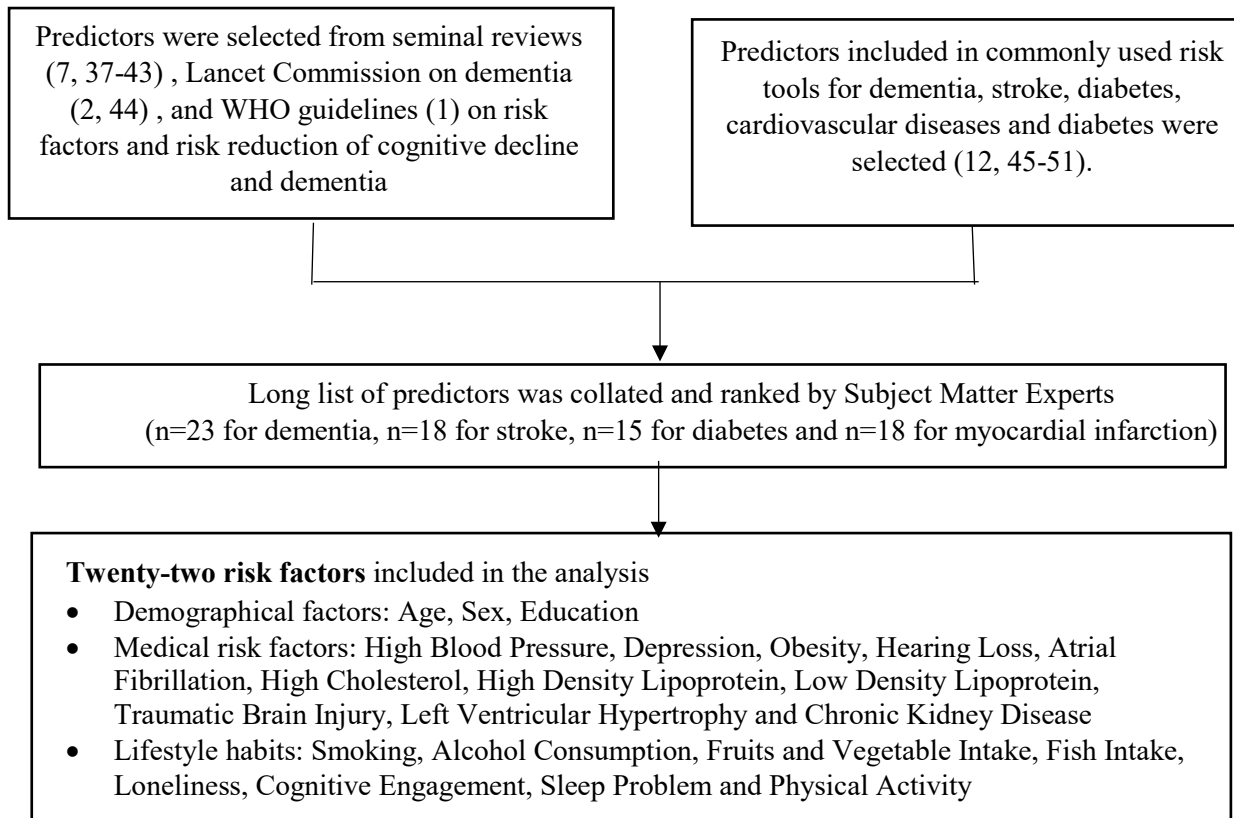


Figure S1: Flowchart showing the process of selecting predictors for the four outcomes

Table S2: Distribution of covariates and outcome in each of the dataset under investigation

	ARIC n=5930	CFAS-I n=13004	CFAS-II n=7762	CHS n=5888	FHS n=3288	HRS-ADAMS n=856	MAS n=1037	MAAS n=491	MAP n=2112	SLAS-I n=1407
Age group										
65-69	610 (10.3)	3184 (24.5)	2301 (29.6)	2021 (34.3)	740 (22.5)			173 (35.2)	163 (7.7)	632 (44.9)
70-74	2146 (36.2)	3150 (24.2)	1830 (23.6)	1873 (31.8)	810 (24.6)	166 (19.4)	268 (25.8)	161 (32.8)	265 (12.5)	410 (29.1)
75-79	1669 (28.1)	2906 (22.3)	1590 (20.5)	1198 (20.3)	784 (23.8)	188 (22.0)	358 (34.5)	132 (26.9)	497 (23.5)	226 (16.1)
80-84	1067 (18.0)	2256 (17.3)	1171 (15.1)	571 (9.7)	704 (21.4)	218 (25.5)	277 (26.7)	25 (5.1)	615 (29.1)	82 (5.8)
85-89	432 (7.3)	1092 (8.4)	637 (8.2)	177 (3.0)	249 (7.6)	149 (17.4)	127 (12.2)		395 (18.7)	38 (2.7)
90+	6 (0.1)	416 (3.2)	233 (3.0)	48 (0.8)	1 (0.0)	135 (15.8)	7 (0.7)		177 (8.4)	19 (1.4)
Sex										
Male	2505 (42.2)	5157 (39.7)	3534 (45.5)	2495 (42.4)	1492 (45.4)	355 (41.5)	465 (44.8)	252 (51.3)	565 (26.8)	559 (39.7)
Education										
Primary	827 (13.9)	930 (7.2)	276 (3.6)	904 (15.4)	1118 (34.0)	291 (34.0)	161 (15.5)	204 (41.5)	64 (3.0)	935 (66.5)
Secondary	2491 (42.0)	9800 (75.4)	5690 (73.3)	828 (14.1)	1211 (36.8)	347 (40.5)	433 (41.8)	191 (38.9)	84 (4.0)	326 (23.2)
Tertiary	2602 (43.9)	1937 (14.9)	1671 (21.5)	4139 (70.3)	825 (25.1)	218 (25.5)	443 (42.7)	84 (17.1)	1964 (93.0)	146 (10.4)
Missing	10 (0.2)	337 (2.6)	125 (1.6)	17 (0.3)	134 (4.1)	0 (0.0)	0 (0.0)	12 (2.4)	0 (0.0)	0 (0)
Obesity										
Under weight	60 (1.0)	NA	NA	98 (1.7)	41 (1.2)	32 (3.7)	11 (1.1)	2 (0.4)	37 (1.8)	100 (7.1)
Normal weight	1414 (23.8)			2170 (36.9)	876 (26.6)	317 (37.0)	319 (30.8)	111 (22.6)	702 (33.2)	853 (60.6)
Over weight	2271 (38.3)			2435 (41.4)	921 (28.0)	296 (34.6)	444 (42.8)	256 (52.1)	805 (38.1)	379 (26.9)
Obese	1946 (32.8)			1166 (19.8)	313 (9.5)	167 (19.5)	236 (22.8)	121 (24.6)	501 (23.7)	70 (5.0)
Missing	239 (4.0)			19 (0.3)	1137 (34.6)	44 (5.1)	27 (2.6)	1 (0.2)	67 (3.2)	5 (0.4)
Smoke										
Never	2174 (36.7)	4352 (33.5)	2898 (37.3)	2738 (46.5)	1599 (48.6)	423 (49.4)	476 (45.9)	166 (33.8)	1217 (57.6)	1114 (79.2)
Former	2725 (46.0)	5890 (45.3)	3825 (49.3)	2444 (41.5)	1454 (44.2)	342 (40.0)	514 (49.6)	212 (43.2)	832 (39.4)	188 (13.4)
Current	325 (5.5)	2370 (18.2)	810 (10.4)	700 (11.9)	235 (7.1)	77 (9.0)	40 (3.9)	98 (20.0)	50 (2.4)	103 (7.3)
Missing	706 (11.9)	392 (3.0)	229 (3.0)	6 (0.1)	0 (0.0)	14 (1.6)	7 (0.7)	15 (3.1)	13 (0.6)	2 (0.1)
High blood pressure										
Yes	1495 (25.2)	8548 (65.7)	3575 (46.1)	3267 (55.5)	2237 (68.0)	312 (36.4)	176 (17.0)	306 (62.3)	612 (29.0)	658 (46.8)
Missing	4350 (73.4)	4101 (31.5)	3834 (49.4)	2614 (44.4)	1051 (32.0)	524 (61.2)	861 (83.0)	185 (37.7)	1500 (71.0)	749 (53.2)
Physical activity										
Less than sufficient	1998 (33.7)	NA	NA	2056 (34.9)	12 (0.4)	NA	NA	274 (55.8)	788 (37.3)	NA
Sufficient	3413 (57.6)			3812 (64.7)	1748 (53.2)			129 (26.3)	1317 (62.4)	
Missing	519 (8.8)			20 (0.3)	1528 (46.5)			88 (17.9)	7 (0.3)	

High Cholesterol										
Yes	516 (8.7)	NA	NA	1241 (21.1)	1104 (33.6)	274 (32.0)	NA	61 (12.4)	185 (8.8)	249 (17.7)
Missing	82 (1.4)			56 (1)	689 (21.0)	77 (9.0)		11 (2.2)	597 (28.3)	23 (1.6)
HDL										
High	3941 (66.5)	NA	NA	3939 (66.9)	593 (18.0)	NA	NA	NA	NA	1021 (72.6)
Missing	82 (1.4)			64 (1.1)	2089 (63.5)					23 (1.6)
LDL										
Low	5440 (91.7)	NA	NA	4710 (80.0)	NA	NA	NA	NA	1419 (67.2)	1139 (81.0)
Missing	118 (2.0)			136 (2.3)					613 (29.0)	32 (2.3)
TBI										
Yes	1242 (20.9)	1433 (11.0)	837 (10.8)	NA	37 (1.1)	48 (5.6)	135 (13)	14 (2.9)	123 (5.8)	NA
Missing	4 (0.1)	349 (2.7)	354 (4.6)		2787 (84.8)	95 (11.1)	48 (4.6)	3 (0.6)	278 (13.2)	
Depression										
Yes	398 (6.7)	1108 (8.5)	506 (6.5)	1016 (17.3)	104 (3.2)	10 (1.2)	107 (10.3)	112 (22.8)	225 (10.7)	149 (10.6)
Missing	112 (1.9)	347 (2.7)	74 (1.0)	10 (0.2)	3064 (93.2)	81 (9.5)	5 (0.5)	12 (2.4)	15 (0.7)	3 (0.2)
Alcohol consumption										
Abstain	3813 (64.3)	1509 (11.6)	1418 (18.3)	2937 (49.9)	NA	320 (37.4)	130 (12.5)	124 (25.3)	NA	1281 (91.0)
Moderate	1600 (27.0)	795 (6.1)	4186 (53.9)	2552 (43.3)		402 (47.0)	554 (53.4)	256 (52.1)		91 (6.5)
Heavy	138 (2.3)	413 (3.2)	1704 (22.0)	375 (6.4)		120 (14.0)	352 (33.9)	83 (16.9)		30 (2.1)
Missing	379 (6.4)	10287 (79.1)	454 (5.8)	24 (0.4)		14 (1.6)	1 (0.1)	28 (5.7)		5 (0.4)
Fruits and vegetable intake										
≥ 5 serves/week	4934 (83.2)	NA	6986 (90.0)	NA	NA	NA	100 (9.6)	NA	NA	119 (8.5)
Missing	297 (5.0)		0 (0.0)				63 (6.1)			1282 (91.1)
Fish intake										
≥ 2 serves/week	2314 (39.0)	NA	1813 (23.4)	2589 (44.0)	69 (2.1)	NA	625 (60.3)	NA	911 (43.1)	684 (48.6)
Missing	299 (5.0)		1982 (25.5)	738 (12.5)	3064 (93.2)		63 (6.1)		1082 (51.2)	614 (43.6)
Cognitive engagement										
Low	NA	NA	5241 (67.5)	NA	NA	596 (69.6)	96 (9.3)	NA	843 (39.9)	1163 (82.7)
Moderate			780 (10.0)			122 (14.3)	452 (43.6)		1077 (51.0)	109 (7.7)
High			1505 (19.4)			19 (2.2)	453 (43.7)		183 (8.7)	119 (8.5)
Missing			236 (3.0)			119 (13.9)	36 (3.5)		9 (0.4)	16 (1.1)
Loneliness										
Yes	NA	131 (1.0)	262 (3.4)	459 (7.8)	68 (2.1)	NA	NA	65 (13.2)	185 (8.8)	188 (13.4)
Missing		10623 (81.7)	294 (3.8)	8 (0.1)	2571 (78.2)			0 (0.0)	236 (11.2)	93 (6.6)

Atrial Fibrillation										
Yes	1528 (25.8)	NA	NA	236 (4.0)	680 (20.7)	28 (3.3)	69 (6.7)	NA	NA	18 (1.3)
Missing	0 (0.0)			1418 (24.1)	0 (0)	522 (61.0)	14 (1.4)			0 (0.0)
Hearing loss										
Yes	702 (11.8)	2798 (21.5)	1376 (17.7)	443 (7.5)	491 (14.9)	NA	357 (34.4)	NA	NA	55 (3.9)
Missing	0 (0.0)	358 (2.8)	290 (3.7)	230 (3.9)	2219 (67.5)		9 (0.9)			0 (0.0)
Sleep problem										
Yes	NA	2496 (19.2)	NA	1310 (22.2)	108 (3.3)	NA	NA	NA	NA	381 (27.1)
Missing		391 (3.0)		101 (1.7)	2397 (72.9)					14 (1.0)
Left ventricular hypertrophy										
Yes	2 (0.0)	NA	NA	283 (4.8)	396 (12)	NA	NA	NA	NA	NA
Missing	4983 (84.0)			217 (3.7)	0 (0)					
Chronic kidney disease										
Yes	NA	NA	NA	85 (1.4)	NA	NA	NA	NA	NA	11 (0.8)
Missing				481 (8.2)						0 (0.0)
Outcomes										
Diabetes										
Incident	509 (8.6)	233 (1.8)	107 (1.4)	466 (7.9)	158 (4.8)	19 (2.2)	17 (1.6)	45 (9.2)	144 (6.8)	38 (2.7)
Prevalent	1699 (28.7)	755 (5.8)	1046 (13.5)	925 (15.7)	490 (14.9)	171 (20.0)	126 (12.2)	36 (7.3)	279 (13.2)	239 (17.0)
Missing	43 (0.7)	0 (0.0)	231 (3.0)	210 (3.6)	0 (0.0)	5 (0.6)	4 (0.4)	0 (0.0)	1 (0.1)	0 (0.0)
Stroke										
Incident	984 (16.6)	367 (2.8)	71 (0.9)	1159 (19.7)	438 (13.3)	15 (1.8)	41 (4.0)	3 (0.6)	127 (6.0)	24 (1.7)
Prevalent	242 (4.1)	905 (7.0)	572 (7.4)	249 (4.2)	208 (6.3)	210 (24.5)	41 (4.0)	0 (0.0)	179 (8.5)	69 (4.9)
Missing	4 (0.1)	0 (0.0)	232 (3.0)	0 (0.0)	0 (0.0)	10 (1.2)	10 (1.0)	145 (29.5)	33 (1.6)	0 (0.0)
MI										
Incident	917 (15.5)	133 (1.0)	42 (0.5)	1082 (18.4)	263 (8.0)	4 (0.5)	31 (3.0)	32 (6.5)	100 (4.7)	25 (1.8)
Prevalent	457 (7.7)	1301 (10.0)	801 (10.3)	562 (9.5)	234 (7.1)	127 (14.8)	120 (11.6)	41 (8.4)	194 (9.2)	61 (4.3)
Missing	293 (4.9)	0 (0.0)	232 (3.0)	0 (0.0)	6 (0.2)	13 (1.5)	3 (0.3)	0 (0.0)	1 (0.1)	0 (0.0)
Dementia										
Incident	901 (15.2)	1307 (10.1)	173 (2.2)	480 (8.2)	704 (21.4)	106 (12.4)	219 (21.1)	54 (11.0)	481 (22.8)	81 (5.8)
Prevalent	296 (5.0)	0 (0.0)	461 (5.9)	227 (3.9)	0 (0.0)	308 (36.0)	0 (0.0)	0 (0.0)	116 (5.5)	0 (0.0)
Missing	0 (0.0)	0 (0.0)	6 (0.1)	2513 (42.7)	1760 (53.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Death										
	988 (16.7)	12665 (97.4)	3626 (46.7)	5340 (90.7)	3281 (99.8)	142 (16.6)	353 (34)	160 (32.6)	1139 (53.9)	253 (18.0)

Note: NA: Not available

Table S3: Definition of covariates used in the process of harmonization of covariates from different cohort dataset.

Covariates	Definition
Age of the participants	Age at baseline
Education	Education at baseline were categorized as less than secondary (0-8), upper secondary (9-11) and tertiary (12 and above) based on years of schooling or grades.
Obesity	Obesity was defined based on BMI categorization according to WHO guidelines: underweight (BMI <18.5), normal (BMI 18.5-24.9), overweight (BMI 25-29.9) and obese (BMI >30).
Smoking status	Self reported smoking status were obtained.
High blood pressure	Hypertension was defined based on average systolic blood pressure ≥ 140 or diastolic ≥ 90 or history of hypertension variable.
Physical activity	Physical activity was scored as the number of self-reported hours of performing activities at each of three intensity levels: mild, moderate and vigorous activities
High Cholesterol	Calculated as >6.2 mmol/L or >240 mg/dl or using medical history (HRS-ADAMS, MAAS).
Low HDL	<1.0 mmol/L for male and <1.3 mmol/L for female or <40 mg/dl for male and <50 mg/dl for female.
High LDL	>4.1 mmol/L or >160 mg/dl
TBI	Defined as self reported history of brain injury / head injury/ knock out with or without consciousness
Depression	Self reported depression symptoms measured by the respective scales (CIDI for HRS-ADAMS; CESD for ARIC, CHS, FHS,MAP; Geriatric mental state exam for CFAS-I, CFAS-II, GDS for SLAS & MAS and SL-90 for MASS) of depression used by different studies.
Alcohol consumption	Self reporting drinking was categorized as abstainer, moderate drinker (<14 drinks per week) and heavy drinker (≥ 14 drinks per week).
Fruits and vegetable intake	Calculated as at least 5 servings of vegetables or 3 servings of vegetables and 2 fruits daily.
Fish intake	Calculated as ≥ 2 serves per week.
Cognitive engagement	Cognitive engagement was a composite measure of life engagement based on the RIASEC scales.
Loneliness	Self-reported loneliness at baseline.
Atrial Fibrillation	Self-reported history of Atrial Fibrillation (HRS-ADAMS, CHS, MAS, ARIC) and Atrial Fibrillation based on ECG (SLAS, FHS) were used.
Hearing loss	Self-reported hearing problem (CFAS-I, CHS, FHS, SLAS), Recommendation/wear a hearing aid (MAS, CFAS-II), Hearing impaired indicated in CIU or hearing problem without aid (ARIC)
Sleep problem	Sleep problem was defined as trouble falling sleeping (CHS), trouble falling asleep/wake up at night or too early (FHS); Never or sometimes (less than once a week) had good sleep (SLAS) and Often or all the time had sleep problem (CFAS)
Left ventricular hypertrophy	Left ventricular hypertrophy conformed by ECG
Chronic kidney disease	Self-reported kidney failure or kidney disease

Table S4: Regression coefficients (95% CI) obtained through meta-analysis following logistic regression model.

Covariates	Dementia		Stroke		MI		Diabetes	
	Male	Female	Male	Female	Male	Female	Male	Female
Age								
65-69	-0.42 (-0.71, -0.13)	-0.55 (-0.90, -0.20)	-0.12 (-0.35, 0.12)	-0.06 (-0.24, 0.13)	0.14 (-0.10, 0.38)	0.14 (-0.12, 0.39)	0.14 (-0.25, 0.53)	0.19 (-0.04, 0.41)
70-74	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
75-79	0.60 (0.37, 0.82)	0.44 (0.18, 0.69)	0.04 (-0.18, 0.25)	0.16 (-0.02, 0.34)	0.14 (-0.09, 0.38)	0.14 (-0.07, 0.35)	0.01 (-0.28, 0.30)	-0.25 (-0.49, 0.00)
80-84	0.91 (0.44, 1.39)	1.07 (0.62, 1.52)	0.23 (-0.01, 0.47)	0.13 (-0.26, 0.52)	0.06 (-0.34, 0.46)	0.03 (-0.26, 0.33)	-0.35 (-0.87, 0.17)	-0.42 (-0.75, -0.08)
85-89	1.37 (1.04, 1.70)	1.64 (1.20, 2.07)	-0.17 (-0.55, 0.21)	0.01 (-0.41, 0.44)	-0.34 (-1.15, 0.48)	0.05 (-0.34, 0.44)	-0.61(-1.33, 0.11)	-0.74 (-1.63, 0.14)
90+	2.08 (1.42, 2.74)	1.73 (0.86, 2.60)	-0.37 (-1.65, 0.90)	-1.00 (-2.04, 0.04)	0.47 (-0.50, 1.44)	-0.23 (-1.25, 0.79)	*	*
Education								
Less than secondary	0.38 (0.08, 0.67)	0.21 (-0.01, 0.43)	-0.06 (-0.31, 0.19)	0.14 (-0.07, 0.34)	0.04 (-0.24, 0.32)	0.36 (-0.11, 0.82)	-0.01 (-0.37, 0.35)	0.33 (0.04, 0.61)
Upper secondary	0.22 (0.01, 0.43)	0.16 (-0.03, 0.35)	0.04 (-0.17, 0.24)	0.11 (-0.08, 0.31)	-0.06 (-0.31, 0.18)	0.22 (-0.01, 0.45)	-0.06 (-0.34, 0.22)	0.17 (-0.08, 0.42)
Tertiary	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Obesity								
Underweight	0.35 (-0.72, 1.42)	0.05 (-0.77, 0.88)	0.17 (-0.96, 1.31)	-0.32 (-0.97, 0.33)	0.46 (-0.61, 1.53)	-0.26 (-1.00, 0.49)	*	-0.59 (-1.75, 0.58)
Normal Weight	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Overweight	-0.02 (-0.25, 0.21)	-0.14 (-0.32, 0.04)	0.05 (-0.18, 0.28)	-0.10 (-0.27, 0.07)	0.26 (0.04, 0.48)	0.12 (-0.08, 0.32)	0.61 (0.26, 0.97)	0.18 (-0.06, 0.42)
Obese	0.09 (-0.21, 0.39)	-0.39 (-0.61, -0.16)	-0.01 (-0.34, 0.31)	-0.21 (-0.41, -0.01)	0.16 (-0.14, 0.45)	0.18 (-0.22, 0.57)	0.92 (0.45, 1.38)	0.87 (0.43, 1.30)
Alcohol Consumption								
Low	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Moderate	-0.27 (-0.50, -0.04)	-0.31 (-0.50, -0.13)	0.08 (-0.12, 0.28)	-0.09 (-0.26, 0.09)	0.02 (-0.28, 0.32)	-0.12 (-0.53, 0.28)	-0.29 (-0.56, -0.01)	-0.32 (-0.56, -0.07)
High	-0.01 (-0.37, 0.35)	-0.33 (-0.76, 0.10)	0.15 (-0.20, 0.50)	-0.18 (-0.64, 0.28)	0.05 (-0.32, 0.43)	0.16 (-0.83, 1.14)	-0.24 (-0.83, 0.35)	-0.90 (-1.78, -0.01)
Smoking								
Non-smoker	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
current smoker	-0.11 (-0.32, 0.10)	-0.09 (-0.30, 0.12)	-0.03 (-0.26, 0.20)	-0.15 (-0.29, 0.00)	0.12 (-0.07, 0.32)	0.14 (-0.05, 0.33)	0.03 (-0.22, 0.29)	0.13 (-0.07, 0.32)
Former smoker	-0.05 (-0.36, 0.26)	0.16 (-0.08, 0.41)	-0.12 (-0.61, 0.37)	0.05 (0.25, 0.35)	-0.13 (-0.71, 0.46)	-0.08 (-0.38, 0.22)	0.15 (-0.27, 0.58)	0.32 (-0.02, 0.66)
Hypertension (Yes)	0.01 (-0.18, 0.20)	-0.13 (-0.35, 0.10)	0.24 (0.07, 0.42)	0.33 (0.15, 0.51)	0.24 (-0.02, 0.50)	0.23 (0.06, 0.40)	0.24 (0.02, 0.47)	0.33 (0.12, 0.55)

Cholesterol (High)	0.21 (-0.40, 0.83)	-0.24 (-0.05, 0.54)	0.29 (-0.25, 0.83)	-0.06 (-0.33, 0.21)	-0.27 (0.78, 0.24)	0.02 (-0.29, 0.33)	0.19 (-0.52, 0.90)	-0.31 (-0.70, 0.09)
HDL (High)	0.08 (-0.19, 0.36)	-0.14 (0.-0.35, 0.07)	-0.24 (-0.44, -0.04)	-0.19 (-0.35, -0.03)	0.02 (-0.24, 0.28)	-0.14 (-0.32, 0.04)	-0.32 (-0.59, -0.04)	-0.40 (-0.64, -0.16)
LDL (High)	0.24 (-0.49, 0.98)	-0.26 (-0.66, 0.14)	-0.20 (-0.73, 0.34)	0.22 (-0.10, 0.55)	0.36 (-0.15, 0.87)	0.08 (-0.29, 0.45)	-0.38 (-1.13, 0.37)	-0.01 (-0.47, 0.50)
Depression (yes)	-0.03 (-0.39, 0.32)	0.27 (-0.02, 0.57)	0.27 (-0.22, 0.75)	0.07 (-0.21, 0.34)	0.14 (-0.19, 0.47)	0.12 (-0.22, 0.46)	0.16 (-0.30, 0.62)	0.24 (-0.05, 0.52)
Fruit & vegetable intake	-0.07 (-0.45, 0.32)	-0.15 (-0.53, 0.23)	-0.15 (-0.54, 0.23)	-0.06 (-0.68, 0.56)	NA	0.04 (-0.37, 0.46)	NA	NA
Fish serve	0.10 (-0.13, 0.32)	-0.00 (-0.17, -0.17)	0.01 (-0.18, 0.20)	0.00 (-0.15, 0.16)	-0.06 (-0.26, 0.15)	-0.14 (-0.32, 0.04)	0.03 (-0.22, 0.29)	0.02 (-0.20, 0.23)
TBI (Yes)	-0.02 (-0.26, 0.22)	-0.04 (-0.28, 0.19)	0.22 (-0.02, 0.46)	0.27 (0.01, 0.52)	0.16 (-0.14, 0.46)	-0.15 (-0.48, 0.19)	0.10 (-0.24, 0.43)	0.35 (0.02, 0.68)
Loneliness (Yes)	0.22 (-0.25, 0.70)	0.38 (-0.02, 0.78)	0.29 (-0.21, 0.78)	0.04 (-0.28, 0.36)	0.30 (-0.21, 0.81)	-0.01 (-0.39, 0.37)	-0.08 (-0.80, 0.65)	0.08 (-0.34, 0.51)
Insufficient physical activity	0.34 (0.10, 0.58)	-0.17 (-0.01, 0.36)	-0.04 (-0.36, 0.29)	0.06 (-0.24, 0.36)	0.12 (-0.50, 0.75)	0.11 (-0.06, 0.28)	-0.09 (-0.38, 0.20)	0.06 (-0.28, 0.17)
Cognitive activity								
Low	Ref	Ref	Not included		Not included		Not included	
Moderate	0.17 (-0.66, 1.00)	0.17 (-0.48, 0.82)	Not included		Not included		Not included	
High	-0.37 (-1.21, 0.46)	-0.28 (-0.88, 0.31)	Not included		Not included		Not included	
Atrial Fibrillation	0.11 (-0.17, 0.40)	0.13 (-0.11, 0.38)	0.26 (0.00, 0.51)	0.44 (0.21, 0.67)	0.13 (-0.30, 0.56)	0.40 (0.04, 0.75)	0.04 (-0.30, 0.39)	0.09 (-0.20, 0.39)
Sleep Problem	-0.01 (-0.38, 0.36)	-0.34 (-0.56, -0.12)	0.20 (-0.18, 0.59)	-0.15 (-0.35, 0.05)	0.50 (-0.26, 1.27)	0.11 (-0.13, 0.35)	0.05 (-0.37, 0.48)	-0.10 (-0.39, 0.20)
Hearing loss	0.19 (-0.04, 0.43)	0.02 (-0.16, 0.19)	0.13 (-0.17, 0.42)	0.11 (-0.10, 0.32)	-0.06 (-0.33, 0.22)	0.26 (-0.00, 0.52)	-0.01 (-0.33, 0.31)	0.33 (0.03, 0.63)
Stroke	0.77 (0.58, 0.98)	0.50 (0.34, 0.65)	Not included		0.11 (-0.33, 0.54)	0.39 (-0.26, 1.05)	Not included	
MI	-0.23 (-0.57, 0.11)	-0.13 (-0.38, 0.11)	0.22 (-0.05, 0.49)	0.34 (0.06, 0.62)	Not included		Not included	
Diabetes	0.07 (-0.13, 0.27)	0.09 (-0.07, 0.26)	0.22 (-0.03, 0.47)	0.24 (0.03, 0.46)	0.37 (0.13, 0.61)	0.43 (0.26, 0.61)	Not included	
Constant	-2.41 (-3.36, -1.46)	-1.82 (-2.82, -0.81)	-2.08 (-2.81, -1.35)	-2.62 (-3.72, -1.51)	-3.05 (-4.32, -1.79)	-3.43 (-4.60, -2.25)	-2.78 (-2.38, -2.19)	-2.56 (-3.05, -2.08)

Table S5: Points for DemNCD-LR risk prediction tools

Covariates	Dementia		Stroke		MI		Diabetes	
	Male	Female	Male	Female	Male	Female	Male	Female
Age								
65-69	-8	-11	-2	-1	3	3	3	4
70-74	0	0	0	0	0	0	0	0
75-79	12	9	1	3	3	3	0	-5
80-84	18	21	5	3	1	1	-7	-8
85-89	27	33	-3	0	-7	1	-12	-15
90+	42	35	-7	-20	9	-5	*	*
Education								
Less than secondary	8	4	-1	3	1	7	0	7
Upper secondary	4	3	1	2	-1	4	-1	3
Tertiary	0	0	0	0	0	0	0	0
Obesity								
Underweight	7	1	3	-6	9	-5	*	-12
Normal Weight	0	0	0	0	0	0	0	0
Overweight	0	-3	1	-2	5	2	12	4
Obese	2	-8	0	-4	3	4	18	17
Alcohol Consumption								
Low	0	0	0	0	0	0	0	0
Moderate	-5	-6	2	-2	0	-2	-6	-6
High	0	-7	3	-4	1	3	-5	-18
Smoking								
Non-smoker	0	0	0	0	0	0	0	0
current smoker	-2	-2	-1	-3	2	3	1	3
Former smoker	-1	3	-2	1	-3	-2	3	6
Hypertension (Yes)	0	-3	5	7	5	5	5	7
Cholesterol (High)	4	-5	6	-1	-5	0	4	-6
HDL	2	-3	-5	-4	0	-3	-6	-8
LDL	5	-5	-4	4	7	2	-8	0
Depression (yes)	-1	5	5	1	3	2	3	5
Fruits and vegetable intake	-1	-3	-3	-1	NA	1	NA	NA
Fish serve	2	0	0	0	-1	0	1	0
TBI (Yes)	0	-1	4	5	3	-3	2	7
Loneliness (Yes)	4	8	6	1	6	0	-2	2
physical activity (insufficient)	7	-3	-1	1	2	2	-2	1
Cognitive activity			Not included		Not included		Not included	
Low	0	0						
Moderate	3	3						
High	-7	-6						
Atrial Fibrillation	2	3	5	9	3	8	1	2
Sleep Problem	0	-7	4	-3	10	2	1	-2
Hearing loss	4	0	3	2	-1	5	0	7
Diabetes	1	2	4	5	7	9	Not included	
Stroke	15	10	Not included		2	8		
MI	-5	-3	4	7	Not included			

Table S6: Validation results of DemNCD-LR risk prediction tool

Validation data		Dementia			Stroke			MI			Diabetes		
		n	ROC	95% CI	n	ROC	95% CI	n	ROC	95% CI	n	ROC	95% CI
Combined data	Male	5217	0.70	(0.68, 0.72)	5552	0.57	(0.54,0.60)	5146	0.67	(0.65, 0.70)	5044	0.69	(0.65,0.72)
	Female	7487	0.66	(0.64, 0.68)	7945	0.61	(0.59, 0.64)	7887	0.65	(0.62, 0.68)	7368	0.63	(0.59, 0.66)
Data components													
ARIC	Male	831	0.71	(0.67, 0.76)	830	0.62	(0.57, 0.68)	746	0.57	(0.52, 0.62)	607	0.61	(0.54, 0.67)
	Female	1139	0.72	(0.68, 0.76)	1156	0.66	(0.62, 0.70)	1080	0.72	(0.68, 0.76)	861	0.59	(0.54, 0.65)
CFAS I	Male	1805	0.69	(0.65, 0.73)	1654	0.54	(0.47, 0.61)	1539	0.54	(0.44, 0.64)	1695	0.60	(0.52, 0.68)
	Female	2746	0.71	(0.68, 0.74)	2566	0.62	(0.54, 0.69)	2542	0.67	(0.56, 0.78)	2585	0.55	(0.46, 0.64)
CFAS II	Male	1181	0.65	(0.54, 0.76)	1095	0.55	(0.40, 0.70)	1006	0.53	(0.12, 0.94)	1004	0.67	(0.57, 0.78)
	Female	1377	0.76	(0.69, 0.82)	1310	0.77	(0.63, 0.91)	1339	0.48	(0.30, 0.66)	1256	0.53	(0.39, 0.66)
CHS	Male	476	0.67	(0.60, 0.74)	828	0.57	(0.52, 0.62)	739	0.54	(0.50, 0.59)	670	0.67	(0.59, 0.75)
	Female	704	0.69	(0.63, 0.74)	1156	0.54	(0.50, 0.58)	1106	0.52	(0.48, 0.57)	989	0.68	(0.62, 0.74)
FHS	Male	209	0.51	(0.43, 0.59)	483	0.57	(0.48, 0.66)	463	0.53	(0.42, 0.60)	439	0.67	(0.50, 0.84)
	Female	314	0.45	(0.39, 0.51)	599	0.63	(0.57, 0.69)	609	0.50	(0.41, 0.58)	541	0.65	(0.53, 0.77)
ADAMS	Male	94	0.66	(0.52, 0.80)	98	0.52	(0.00, 1.00)		N/A		NA		
	Female	104	0.57	(0.45, 0.70)	125	0.71	(0.32, 1.00)						
MAAS	Male	89	0.66	(0.45, 0.88)				77	0.43	(0.16, 0.70)	82	0.55	(0.32, 0.78)
	Female	85	0.55	(0.37, 0.73)	N/A			85	0.55	(0.33, 0.76)	75	0.73	(0.58, 0.87)
MAP	Male	175	0.59	(0.49, 0.68)	175	0.37	(0.22, 0.53)	161	0.56	(0.40, 0.72)	154	0.75	(0.64, 0.86)
	Female	522	0.64	(0.59, 0.69)	491	0.67	(0.57, 0.77)	504	0.62	(0.46, 0.71)	486	0.69	(0.60, 0.77)
MAS	Male	162	0.65	(0.55, 0.75)	155	0.55	(0.36, 0.75)	138	0.62	(0.40, 0.84)	NA		
	Female	199	0.55	(0.45, 0.66)	192	0.46	(0.28, 0.63)	185	0.57	(0.28, 0.86)			
SLAS I	Male	195	0.77	(0.62, 0.92)	179	0.68	(0.41, 0.95)	183	0.65	(0.46, 0.84)	161	0.50	(0.30, 0.70)
	Female	297	0.73	(0.57, 0.89)	293	0.66	(0.33, 0.99)	293	0.42	(0.00, 0.89)	250	0.60	(0.38, 0.82)

Table S7: Hosmer Lemeshow goodness of fit for the DemNCD-LR in the validation dataset.

Validation data		Dementia			Stroke			MI			Diabetes		
		n	HL	p-values	n	HL	p-values	n	HL	p-values	n	HL	p-values
Combined data	Male	5217	29.29	0.04	5552	9.55	0.89	5146	24.92	0.10	5858	22.04	0.23
	Female	7487	18.16	0.45	7945	38.67	<0.01	7887	45.78	<0.001	8525	117.73	<0.001
Data components													
ARIC	Male	831	5.10	0.75	830	6.9	0.55	746	10.73	0.22	862	10.51	0.21
	Female	1139	9.69	0.29	1156	9.33	0.32	1080	9.38	0.31	1188	9.98	0.27
CFAS I	Male	1805	24.19	0.15	1654	12.39	0.58	1539	11.54	0.57	1805	14.02	0.60
	Female	2746	13.19	0.11	2566	7.84	0.35	2542	4.99	0.76	2746	3.10	0.93
CFAS II	Male	1181	6.51	0.59	1095	1.77	0.99	1006	8.41	0.39	1237	5.21	0.73
	Female	1377	7.71	0.46	1310	6.84	0.55	1339	8.12	0.42	1479	8.14	0.42
CHS	Male	476	10.72	0.22	828	10.27	0.25	739	12.94	0.11	665	6.04	0.64
	Female	704	10.82	0.21	1156	8.50	0.39	1106	4.28	0.83	991	6.04	0.61
FHS	Male	209	10.28	0.25	483	13.43	0.10	463	14.22	0.08	343	10.37	0.24
	Female	314	9.21	0.32	599	9.00	0.34	609	5.32	0.72	499	15.20	0.06
ADAMS	Male	94	11.12	0.20	98	5.07	0.75		N/A		122	9.24	0.32
	Female	104	6.12	0.63	125	8.07	0.43				174	1.89	0.98
MAAS	Male	89	7.86	0.45				77	7.96	0.44	198	7.14	0.52
	Female	85	5.30	0.73	N/A			84	7.12	0.52	199	6.44	0.60
MAP	Male	175	5.33	0.72	175	7.92	0.44	161	4.88	0.77	148	15.72	0.05
	Female	522	5.98	0.65	491	1.23	0.99	504	3.24	0.92	467	11.10	0.20
MAS	Male	162	7.62	0.47	155	11.58	0.17	138	8.90	0.26	162	13.24	0.10
	Female	199	6.04	0.64	192	5.50	0.60	185	9.06	0.34	199	10.78	0.21
SLAS I	Male	195	7.06	0.53	179	10.01	0.26	183	11.49	0.18	316	13.38	0.10
	Female	297	24.44	<0.01	293	5.43	0.71	293	4.49	0.81	583	11.07	0.20

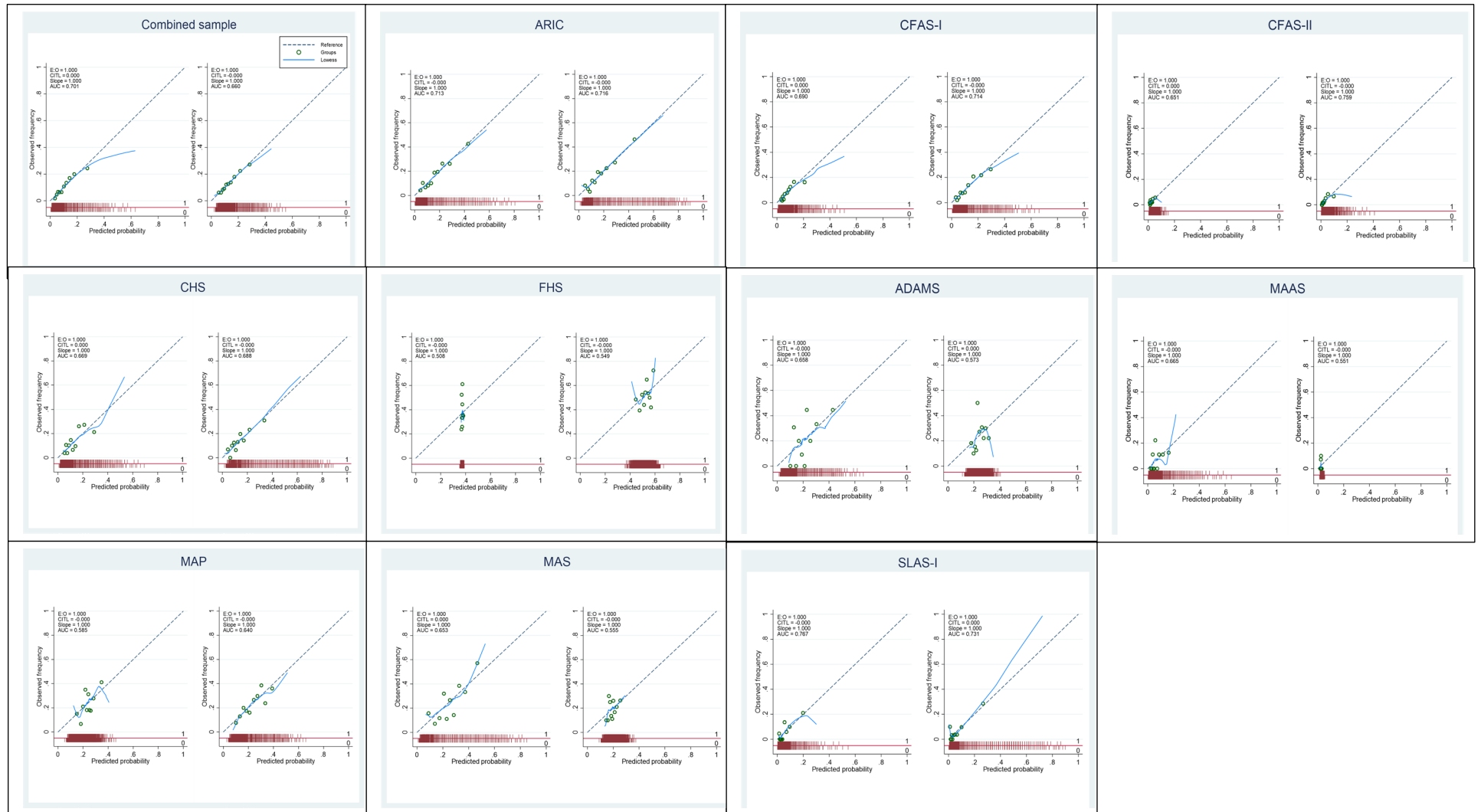


Figure S2: Calibration plot of observed against expected probabilities for assessment of DemNCD-LR performance for predicting dementia

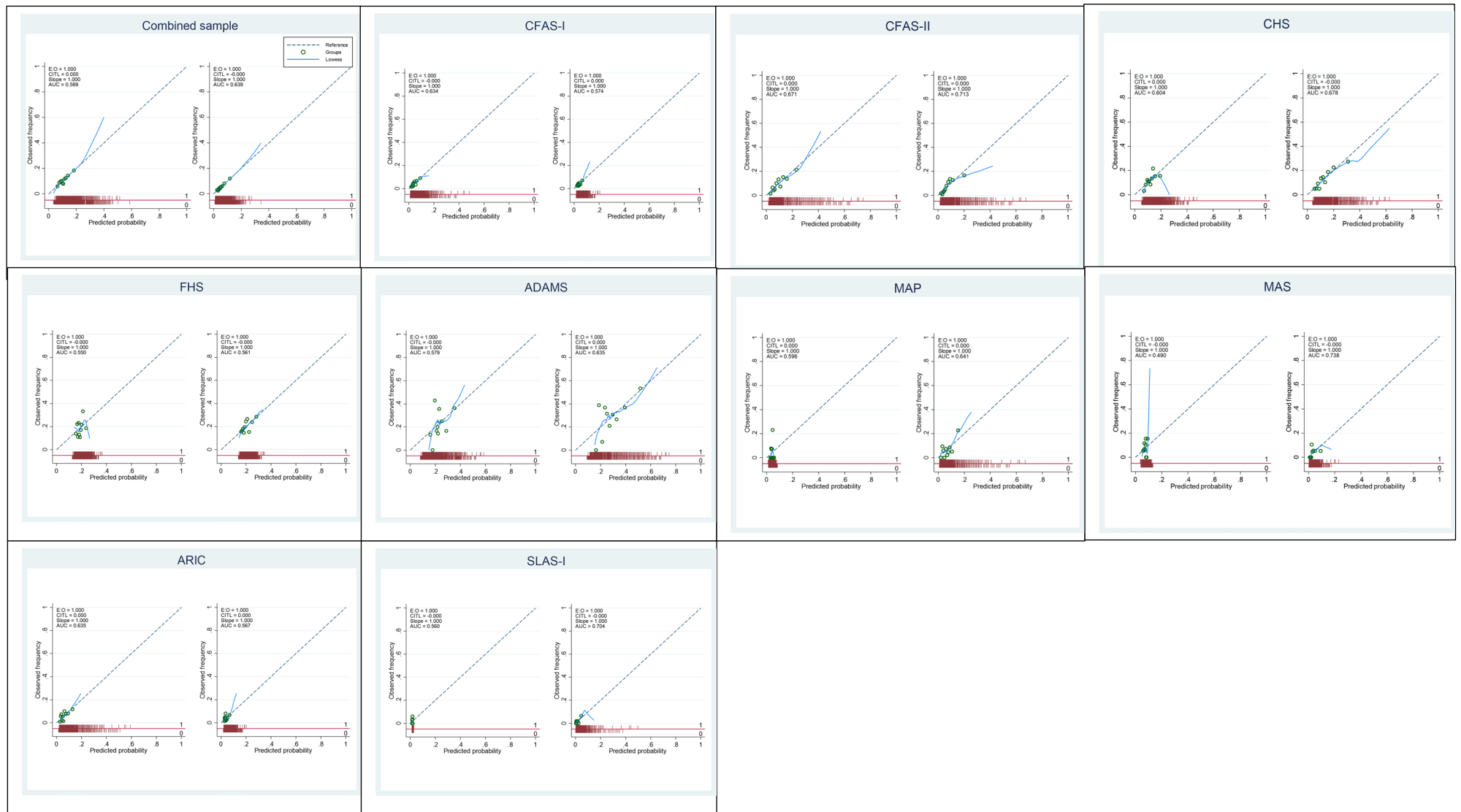


Figure S3: Calibration plot of observed against expected probabilities for assessment of DemNCD-LR performance for predicting stroke.

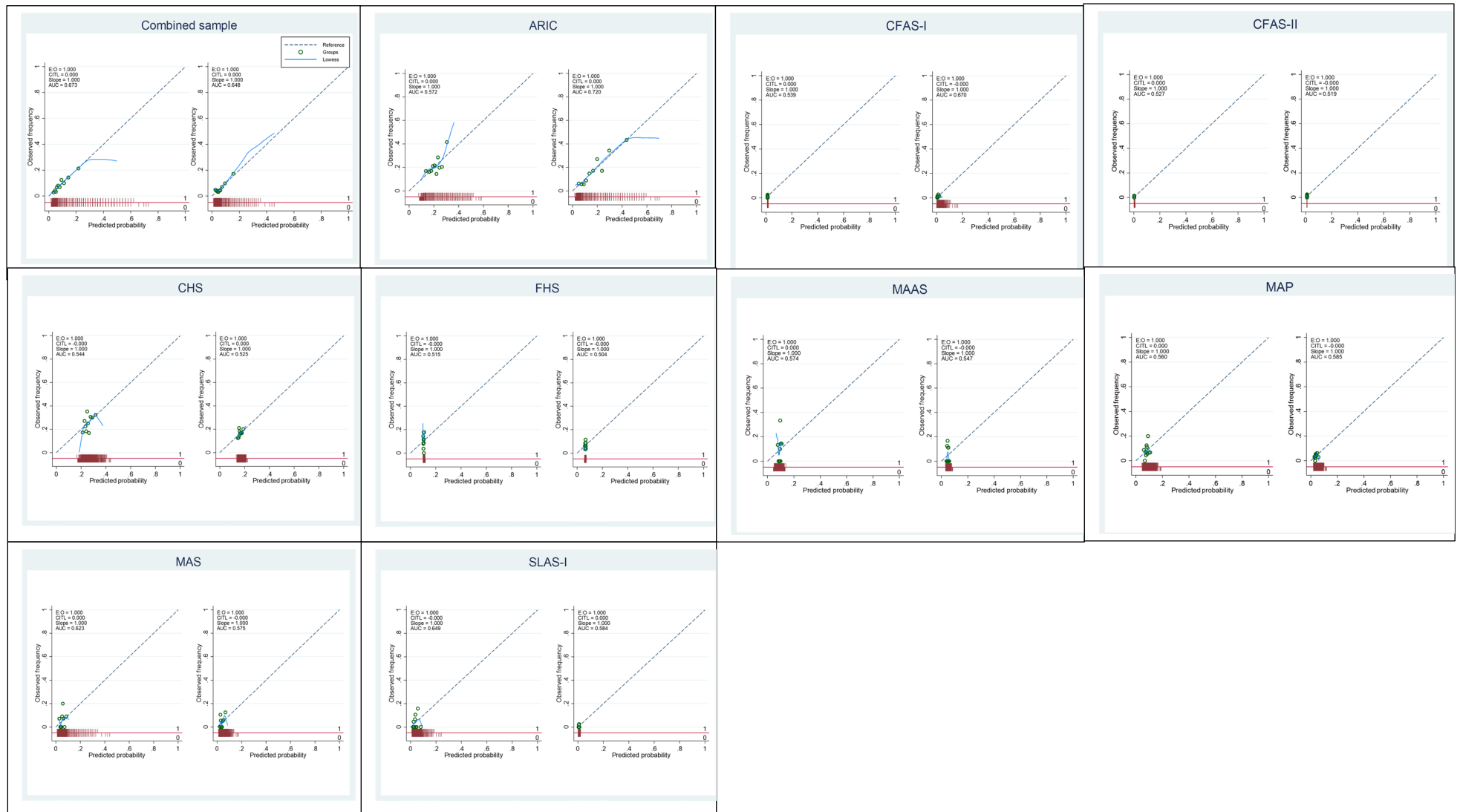


Figure S4: Calibration plot of observed against expected probabilities for assessment of DemNCD-LR performance for predicting MI.

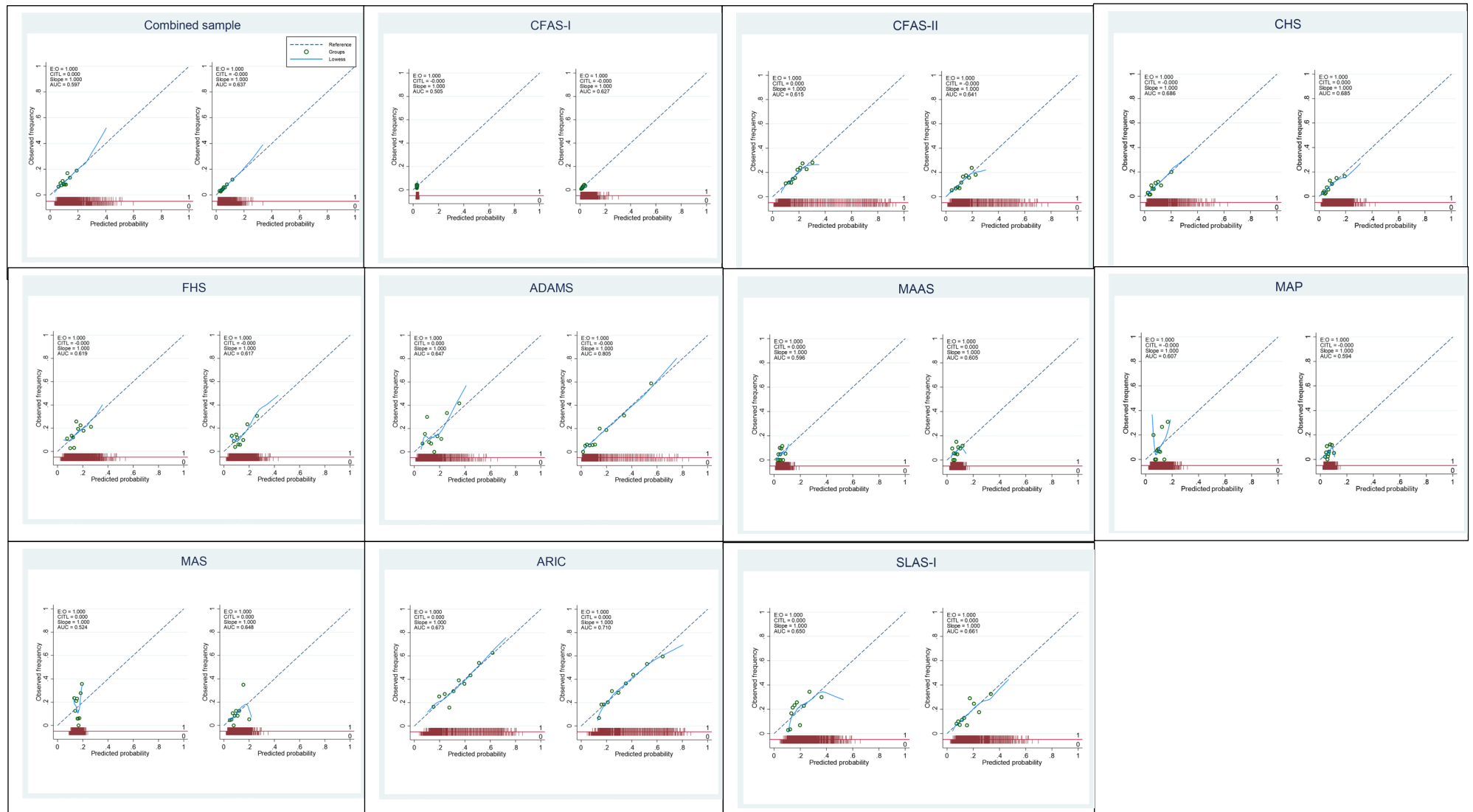


Figure S5: Calibration plot of observed against expected probabilities for assessment of DemNCD-LR performance for predicting diabetes

Table S8: Comparison of sensitivity, specificity for a given cutoff of DemNCD-LR risk scores for males and females.

For males		Model data				Validation data		
Outcome DemNCD-LR score Range	Quantile cutoff (>=)	Cut-off Score	OR	Sensitivity (%)	Specificity (%)	OR	Sensitivity (%)	Specificity (%)
Dementia (Model data: -28,71) (Validation: -55, 69)	16.6%	-5	2.62 (1.73, 3.97)	96.9	18.8	1.75 (1.10, 2.79)	94.7	18.8
	33.3%	2	4.16 (2.80, 6.19)	88.9	36.9	1.93 (1.22, 3.04)	86.3	35.9
	50%	9	6.07 (4.13, 8.91)	77.2	53.8	3.39 (2.21, 5.19)	77.0	53.1
	66.7%	16	9.38 (6.44, 13.65)	60.7	70.1	5.92 (3.96, 8.87)	61.6	69.4
	83.3%	24	15.15 (10.48, 21.91)	36.3	85.7	8.54 (5.75, 12.71)	34.9	85.4
Stroke (Model data:-17, 30) Validation: -28, 36)	16.6%	0	1.27 (0.98, 1.64)	87.2	19.0	1.36 (0.95, 1.99)	86.2	19.4
	33.3%	3	1.14 (0.92, 1.63)	71.1	37.8	1.19 (0.79, 1.80)	69.0	37.1
	50%	5	1.54 (1.20, 1.98)	60.1	51.2	1.20 (0.83, 1.73)	58.5	49.6
	66.7%	8	1.75 (1.37, 2.25)	41.3	69.3	1.64 (1.16, 2.34)	42.5	68.4
	83.3%	12	2.30 (1.79, 2.96)	20.6	86.8	2.21 (1.56, 3.13)	22.1	85.9
MI (Model data: -13, 38; Validation: -12, 39)	16.6%	3	1.57 (1.06, 2.31)	94.2	19.9	1.72 (1.05, 2.83)	94.0	19.8
	33.3%	6	2.27 (1.57, 3.29)	86.1	37.7	3.04 (1.92, 4.82)	84.9	37.3
	50%	9	3.48 (2.45, 4.93)	75.3	53.9	3.17 (2.01, 4.98)	70.9	52.5
	66.7%	12	4.97 (3.56, 6.92)	59.7	69.3	3.91 (2.52, 6.06)	55.1	69.0
	83.3%	17	8.77 (6.34, 12.12)	35.1	86.3	8.38 (5.50, 12.76)	34.4	86.4
Diabetes (Model data: -26, 34; Validation: -24,30)	16.6%	-4	1.67 (1.12, 2.49)	92.1	19.0	0.63 (0.36, 1.11)	88.5	19.6
	33.3%	1	1.69 (1.05, 2.71)	76.5	41.5	1.15 (0.63, 2.08)	80.5	41.4
	50%	3	1.76 (1.16, 2.67)	69.2	51.8	1.28 (0.78, 2.11)	73.6	51.6
	66.7%	6	2.55 (1.71, 3.80)	56.4	69.3	1.92 (1.21, 3.06)	60.2	69.4
	83.3%	11	6.36 (4.44, 9.12)	39.7	85.0	3.88 (3.27, 7.51)	41.8	85.7
For females								
Dementia (Model data: -53,51) (Validation: -55, 69)	16.6%	-15	1.12 (0.89, 1.42)	92.7	18.4	1.16 (0.91, 1.45)	91.4	19.7
	33.3%	-7	1.80 (1.45, 2.24)	84.4	37.0	1.73 (1.38, 2.17)	82.9	36.3
	50%	1	2.38 (1.93, 2.93)	72.1	54.2	2.00 (1.60, 2.48)	70.0	53.3
	66.7%	10	3.77 (3.09, 4.61)	55.4	71.9	3.53 (2.87, 4.34)	54.8	70.7
	83.3%	22	6.36 (5.24, 7.73)	32.4	87.2	5.07 (4.15, 6.20)	31.0	86.1

Stroke (Model data: -31, 33; Validation: -28, 36)	16.6%	-3	1.25 (1.00, 1.56)	88.2	17.4	1.15 (0.91, 1.46)	78.6	30.1
	33.3%	1	1.06 (0.85, 1.32)	73.4	34.8	1.19 (0.95, 1.50)	65.2	48.2
	50%	4	1.38 (1.11, 1.71)	59.9	53.7	1.09 (0.84, 1.41)	57.1	58.6
	66.7%	7	1.59 (1.29, 1.97)	44.2	70.4	1.64 (1.32, 2.03)	42.8	74.3
	83.3%	11	2.90 (2.37, 2.54)	27.0	86.3	2.62 (2.15, 3.21)	26.3	88.1
MI (Model data: -12, 50; Validation: -10, 51)	16.6%	6	0.87 (0.65, 1.17)	88.4	20.1	0.71 (0.49, 1.04)	85.8	18.8
	33.3%	9	0.95 (0.71, 1.26)	79.8	36.9	0.74 (0.50, 1.09)	76.2	36.8
	50%	12	1.38 (1.05, 1.81)	70.4	54.0	0.97 (0.67, 1.41)	66.7	53.6
	66.7%	15	2.03 (1.60, 2.58)	58.6	68.7	1.49 (1.08, 2.04)	56.3	67.9
	83.3%	21	4.92 (3.93, 6.15)	37.0	87.0	3.46 (2.58, 4.63)	35.6	86.4
Diabetes (Model data: -45, 46; Validation: -38, 44)	16.6%	-6	1.54 (1.08, 2.21)	92.8	17.6	1.18 (0.77, 1.82)	88.5	17.5
	33.3%	0	1.79 (1.24, 2.56)	80.7	36.7	0.96 (0.60, 1.54)	73.3	37.0
	50%	4	2.04 (1.44, 2.91)	68.8	52.8	1.16 (0.74, 1.83)	63.3	52.8
	66.7%	8	2.77 (1.98, 3.87)	55.5	68.6	1.62 (1.07, 2.45)	51.5	68.3
	83.3%	14	6.02 (4.41, 8.23)	36.6	85.2	3.43 (2.35, 5.01)	33.6	85.1

Table S9: Validation of DemNCD and DemNCD-LR risk tools with age only model in the combined sample

Model	Sex	Dementia		Stroke		MI		Diabetes	
		n	Harrel' C (95% CI)	n	Harrel' C (95% CI)	n	Harrel' C (95% CI)	n	Harrel' C (95% CI)
DemNCD	Male	4862	0.68 (0.65, 0.70)	5073	0.53 (0.49, 0.56)	4631	0.51 (0.48, 0.54)	4607	0.51 (0.47, 0.55)
	Female	6924	0.69 (0.67, 0.71)	7323	0.56 (0.54, 0.59)	7205	0.53 (0.50, 0.56)	6807	0.51 (0.48, 0.55)
DemNCD-LR		n	AUC (95% CI)	n	AUC (95% CI)	n	AUC (95% CI)	n	AUC (95% CI)
	Male	5217	0.66 (0.64, 0.68)	5552	0.53 (0.50, 0.56)	5147	0.48 (0.45, 0.50)	5044	0.54 (0.51, 0.57)
	Female	7487	0.66 (0.64, 0.68)	7945	0.56 (0.54, 0.58)	7887	0.48 (0.46, 0.50)	7368	0.55 (0.52, 0.58)