Supplemental Material

Table S1. Longitudinal Correlates of Lipid concentrations in Women.

Correlate†	Total Cholesterol‡		HDL Cholesterol		LDL Cholesterol‡		Log Triglycerides		Non-HDL Cholesterol‡	
	β Estimate	*p-value*	*β Estimate*	*p-value*	*β Estimate*	*p-value*	*β Estimate*	*p-value*	*β Estimate*	*p-value*
Age, 5 years	4.52	<0.0001	1.52	<0.0001	1.20	0.0008	0.08	<0.0001	2.48	<0.0001
Body Mass Index, kg/m^2	0.68	<0.0001	-1.03	<0.0001	0.90	<0.0001	0.04	<0.0001	1.80	<0.0001
Smoking	4.47	<0.0001	-4.17	<0.0001	7.31	<0.0001	0.09	<0.0001	8.98	<0.0001
Moderate to Heavy Drinking	3.99	<0.0001	3.54	<0.0001	---	---	---	---	---	---
Total Caloric Intake, 100 kcal	-0.22	0.001	---	---	-0.25	<0.0001	0.002	0.005	-0.18	0.007
Physical Activity Index, 1 point	---	---	---	---	---	---	-0.002	0.001	-0.13	0.02
Diabetes	---	---	-2.59	<0.0001	-6.00	0.0002	0.13	<0.0001	---	---
Lipid-lowering medication use	---	---	1.98	<0.0001	54.10	<0.0001	-0.14	<0.0001	69.26	<0.0001
Systolic Blood Pressure	0.19	<0.0001	0.05	<0.0001	0.09	<0.0001	0.002	<0.0001	0.13	<0.0001
Antihypertensive medication use	---	---	---	---	---	---	0.04	0.0002	2.52	0.006
Menopause Status	46.32	<0.0001	2.13	<0.0001	23.16	<0.0001	0.52	<0.0001	30.39	<0.0001
Interactions										
Age × Lipid Lowering medication	---	---	---	---	-4.16	<0.0001	---	---	-5.80	<0.0001
Age × Menopause	-3.45	<0.0001	---	---	-1.62	<0.0001	-0.04	<0.0001	-2.20	<0.0001

*HDL – high-density lipoprotein; LDL – low-density lipoprotein.

† Final covariates chosen based on backward selection.

‡ Values of total cholesterol, LDL cholesterol, and non-HDL cholesterol were adjusted to account for lipid-lowering medication use.

Table S2. Longitudinal Correlates of Lipid concentrations in Men.

Correlate†	Total Cholesterol‡		HDL Cholesterol		LDL Cholesterol‡		Log Triglycerides		Non-HDL Cholesterol‡	
	β Estimate	*p-value*	*β Estimate*	*p-value*	*β Estimate*	*p-value*	*β Estimate*	*p-value*	*β Estimate*	*p-value*
Age, 5 years	9.73	<0.0001	1.66	<0.0001	4.40	<0.0001	0.04	<0.0001	0.08	0.6
Body Mass Index, kg/m^2	3.92	<0.0001	-1.13	<0.0001	0.85	<0.0001	0.04	<0.0001	2.02	<0.0001
Smoking	3.69	<0.0001	-3.06	<0.0001	5.28	<0.0001	0.07	<0.0001	6.58	<0.0001
Moderate to Heavy Drinking	4.46	<0.0001	3.32	<0.0001	---	---	---	---	---	---
Total Caloric Intake, 100 kcal	---	---	-0.05	0.002	---	---	0.003	<0.0001	---	---
Physical Activity Index, 1 point	-0.09	0.02	---	---	---	---	-0.002	<0.0001	-0.08	0.03
Diabetes	22.82	0.002	-1.76	<0.0001	-6.80	<0.0001	0.86	<0.0001	46.41	<0.0001
Systolic Blood Pressure	0.17	<0.0001	0.05	<0.0001	0.53	<0.0001	0.002	<0.0001	0.14	<0.0001
Antihypertensive medication use	35.20	<0.0001	---	---	30.47	<0.0001	0.02	0.046	---	---
Lipid-lowering medication use	-2.10	0.009	2.31	<0.0001	---	---	-0.18	<0.0001	-5.79	<0.0001
Interactions										
Age × Body Mass Index	-0.28	<0.0001	---	---	---	---	---	---	---	---
Age × Diabetes Status	-2.22	0.0002	---	---	---	---	-0.06	<0.0001	-4.11	<0.0001
Age × Antihypertensive medication	-2.90	<0.0001	---	---	-2.50	<0.0001	---	---	---	---
Age × Systolic Blood Pressure	---	---	---	---	-0.04	<0.0001	---	---	---	---

*HDL – high-density lipoprotein; LDL – low-density lipoprotein.

† Final covariates chosen based on backward selection.

‡ Values of total cholesterol, LDL cholesterol, and non-HDL cholesterol were adjusted to account for lipid-lowering medication use.

Table S3. Trajectory Model Fit Diagnostics.

Lipid	Group	π_j	95% CI for π_j	P_j	$AvePP_j$	OCC_j
Total Cholesterol	Optimal (155-165 mg/dL)	0.1998	[0.1813, 0.2188]	0.2303	0.9020	36.84
	Borderline (190-200 mg/dL)	0.4148	[0.3927, 0.4359]	0.4421	0.8866	11.03
	Elevated (220-235 mg/dL)	0.2710	[0.2493, 0.2936]	0.2467	0.8631	16.95
	Elevated and decreasing (drops from 260 mg/dL to 190 mg/dL over time)	0.0668	[0.0542, 0.0822]	0.0505	0.8524	80.60
	Very elevated and decreasing (drops from 285 mg/dL to 240 mg/dL over time)	0.0474	[0.0399, 0.0563]	0.0303	0.9395	311.97
HDL Cholesterol	Very low and stable (35-40 mg/dL)	0.2598	[0.2402, 0.2795]	0.1968	0.9281	36.78
	Low and stable (45-50 mg/dL)	0.3491	[0.3304, 0.3681]	0.3328	0.9012	17.01
	Borderline (55-60 mg/dL)	0.2484	[0.2323, 0.2651]	0.2920	0.9148	32.48
	High and increasing (increases from 70/80 mg/dL to 75/100 mg/dL over time)	0.1117	[0.1004, 0.1235]	0.1381	0.9264	100.09
	Optimal (80-90 mg/dL)	0.0309	[0.0251, 0.0383]	0.0404	0.9352	452.02
LDL Cholesterol	Borderline (115-120 mg/dL)	0.1305	[0.1133, 0.1496]	0.1477	0.8944	56.45
	Slightly elevated and decreasing (drops from 145 mg/dL to 125 mg/dL over time)	0.3286	[0.3062, 0.3511]	0.3760	0.8763	14.47
	Elevated and decreasing (drops from 170 mg/dL to 135 mg/dL over time)	0.3306	[0.3084, 0.3525]	0.3241	0.8748	14.15

	Very elevated and decreasing (drops from 220 mg/dL to 155 mg/dL over time)	0.1730	[0.1550, 0.1924]	0.1322	0.8961	41.22
	Optimal (55-70 mg/dL)	0.0373	[0.0297, 0.0463]	0.0201	0.9285	335.31
Triglycerides	Borderline (81-99 mg/dL)	0.2214	[0.2023, 0.2416]	0.2587	0.9011	32.04
	Elevated (134-164 mg/dL)	0.4268	[0.4054, 0.4476]	0.4522	0.8846	10.30
	Very Elevated (245-314 mg/dL)	0.2862	[0.2664, 0.3068]	0.2456	0.9096	25.10
	Optimal (100-115 mg/dL)	0.0656	[0.0568, 0.0755]	0.0435	0.9434	237.32
Non-HDL Cholesterol	Borderline (145-137 mg/dL)	0.2005	[0.1836, 0.2182]	0.2420	0.9258	49.74
	Elevated and Decreasing (drops from 185 mg/dL to 157 mg/dL over time)	0.4286	[0.4081, 0.4489]	0.4726	0.9099	13.46
	Very elevated and decreasing (drops from 235 mg/dL to 180 mg/dL over time)	0.3016	[0.2812, 0.3227]	0.2433	0.9120	24.00
	Very low and stable (35-40 mg/dL)	0.0693	[0.0600, 0.0796]	0.0421	0.9386	205.42

π_j is the probability of group membership; P_j is the proportion of the sample assigned to group j; $AvePP_j$ is the posterior probability of group membership among individuals assigned to group j; OCC_j is the odds of correct classification in group j

Table S4. Change in c-statistic with addition of Lipid Variables.

Lipid	Model	c-statistic (Incident ASCVD)	c-statistic (All-Cause Mortality)
Total Cholesterol (TC)	Base*	0.648	0.620
	Base + Trajectory Group	0.664†	0.622†
	Base + TC at exam 8	0.650	0.634
	Base + Average TC	0.655	0.623
HDL Cholesterol (HDL-C)	Base‡	0.629	0.622
	Base + Trajectory Group	0.670†	0.686†
	Base + HDL-C at exam 8	0.668	0.649
	Base + Average HDL-C	0.666	0.670
LDL Cholesterol (LDL-C)	Base§	0.670	0.625
	Base + Trajectory Group	0.692†	0.629†
	Base + LDL-C at exam 8	0.670	0.632
	Base + Average LDL-C	0.681	0.629
Triglycerides (TG)	Base‖	0.681	0.634
	Base + Trajectory Group	0.698†	0.634†
	Base + log(TG) at exam 8	0.689	0.634
	Base + Average log(TG)	0.713	0.661
Non-HDL Cholesterol	Base#	0.658	0.629
	Base + Trajectory Group	0.684†	0.634†
	Base + Non-HDL-C at exam 8	0.657	0.636
	Base + Average Non-HDL-C	0.686	0.642

*Base model contains lipid-lowering medication, smoking status, diabetes status, body mass index, systolic blood pressure, alcohol consumption, and antihypertensive medication use.

†This is the average c-statistic over all "imputed" datasets

‡Base model contains lipid-lowering medication, smoking status, diabetes status, body mass index, systolic blood pressure, alcohol consumption, physical activity index.

§ Base model contains lipid-lowering medication, smoking status, diabetes status, body mass index, systolic blood pressure, alcohol consumption, total caloric intake, and antihypertensive medication use.

‖ Base model contains lipid-lowering medication, smoking status, body mass index, systolic blood pressure, total caloric intake, physical activity index, and antihypertensive medication use.

Base model contains lipid-lowering medication, smoking status, body mass index, systolic blood pressure, total caloric intake, and physical activity index.

Table S5. Results from Weighted Cox Model*.

Lipid	Group	Incident ASCVD			All-Cause Mortality		
		Events / no. at risk (%)	Hazard Ratio [95% CI]†	p-value	Events / no. at risk (%)	Hazard Ratio [95% CI] †	p-value
Total Cholesterol	Optimal (155-165 mg/dL)	23/547 (4.20)	1.00	---	57/547 (10.42)	1.00	---
	Borderline (190-200 mg/dL)	106/1050 (10.01)	2.13 [1.46, 3.11]	<0.0001	99/1050 (9.43)	0.95 [0.70, 1.27]	0.7
	Elevated (220-235 mg/dL)	44/586 (7.51)	1.61 [1.01, 2.56] 2.621]	0.046	64/586 (10.92)	1.19 [0.84, 1.68]	0.3
	Elevated and decreasing (drops from 260 mg/dL to 190 mg/dL over time)	11/120 (9.17)	1.95 [1.07, 3.53]	0.03	20/120 (16.67)	1.65 [1.04, 2.62]	0.03
	Very elevated and decreasing (drops from 285 mg/dL to 240 mg/dL over time)	15/72 (20.83)	4.03 [2.10, 7.73]	<0.0001	16/72 (22.22)	2.58 [1.51, 4.39]	0.0005
HDL Cholesterol‡	Very low and stable (35-40 mg/dL)	69/463 (14.90)	3.72 [2.06, 6.74]	<0.0001	76/463 (16.41)	2.88 [1.73, 4.80]	<0.0001
	Low and stable (45-50 mg/dL)	76/783 (9.71)	2.48 [1.45, 4.23]	0.0009	90/783 (11.49)	2.02 [1.28, 3.20]	0.003
	Borderline (55-60 mg/dL)	34/687 (4.95)	1.23 [0.72, 2.10]	0.4	58/687 (8.44)	1.46 [0.94, 2.27]	0.09
	High and increasing (increases from 70/80 mg/dL to 75/100 mg/dL over time)	16/420 (3.81)	1.00	---	26/420 (6.19)	1.00	---
LDL Cholesterol	Optimal (80-90 mg/dL)	6/323 (1.86)	1.00	---	25/324 (7.72)	1.00	---

	Borderline (115-120 mg/dL)	60/825 (7.27)	2.80 [1.45, 5.42]	0.002	68/825 (8.24)	1.13 [0.76, 1.67]	0.5
	Slightly elevated and decreasing (drops from 145 mg/dL to 125 mg/dL over time)	75/710 (10.56)	3.89 [1.94, 7.80]	0.0001	76/711 (10.69)	1.45 [0.94, 2.24]	0.1
	Elevated and decreasing (drops from 170 mg/dL to 135 mg/dL over time)	26/290 (8.97)	2.87 [1.31, 6.29]	0.008	45/290 (15.52)	2.30 [1.39, 3.81]	0.001
	Very elevated and decreasing (drops from 220 mg/dL to 155 mg/dL over time)	6/44 (13.64)	4.88 [1.83, 12.97]	0.002	11/44 (25.00)	3.98 [2.03, 7.80]	<0.0001
Log Triglycerides	Optimal (55-70 mg/dL)	26/571 (4.55)	1.00	---	55/571 (9.63)	1.00	---
	Borderline (81-99 mg/dL)	71/997 (7.12)	1.34 [0.91, 1.98]	0.1	97/997 (9.73)	0.99 [0.74, 1.32]	0.9
	Elevated (134-164 mg/dL)	63/541 (11.65)	1.83 [1.17, 2.84]	0.008	62/541 (11.46)	1.02 [0.72, 1.46]	0.9
	Very Elevated (245-314 mg/dL)	11/96 (11.46)	1.88 [0.97, 3.62]	0.06	9/96 (9.38)	0.81 [0.41, 1.57]	0.5
Non-HDL Cholesterol	Optimal (100-115 mg/dL)	13/534 (2.43)	1.00	---	38/534 (7.12)	1.00	---
	Borderline (145-137 mg/dL)	92/1043 (8.82)	3.29 [1.95, 5.52]	<0.0001	104/1043 (9.97)	1.37 [0.97, 1.93]	0.07
	Elevated and Decreasing (drops from 185 mg/dL to 157 mg/dL over time)	52/537 (9.68)	3.14 [1.74, 5.65]	0.0001	59/537 (10.99)	1.60 [1.05, 2.43]	0.03

	Very elevated and decreasing (drops from 235 mg/dL to 180 mg/dL over time)	14/93 (15.05)	4.46 [2.08, 9.60]	0.0001	22/93 (23.66)	3.63 [2.10, 6.28]	<0.0001

*CI – confidence interval; ASCVD – atherosclerotic cardiovascular disease; HDL – high-density lipoprotein; LDL – low-density lipoprotein.

† All models were adjusted for statin use, smoking status, diabetes status, body mass index, and systolic blood pressure. Alcohol consumption was also adjusted for in total cholesterol, HDL-C and LDL-C models. Total caloric intake was adjusted for in LDL-C and triglyceride models. Physical activity index was adjusted for in HDL-C, triglyceride, and non-HDL-C models. Use of antihypertensive medications were adjusted for in total cholesterol, LDL-C and triglyceride models. Baseline hazards were allowed to differ for men and women in all models.

‡ HDL Trajectory Groups 4 & 5 were combined for analyses to increase statistical power since there were only 2 incident ASCVD events and 5 deaths in group 5.

Table S6. Risk of ASCVD and All-Cause Mortality by Lipid Trajectory Group with common set of covariates.

Lipid	Group	Incident ASCVD		All-Cause Mortality	
		Hazard Ratio [95% CI]†	p-value	Hazard Ratio [95% CI] †	p-value
Total Cholesterol	Optimal (155-165 mg/dL)	1.00	---	1.00	---
	Borderline (190-200 mg/dL)	2.25 [1.29, 3.93]	0.004	0.90 [0.62, 1.30]	0.6
	Elevated (220-235 mg/dL)	1.74 [0.94, 3.21]	0.08	1.17 [0.77, 1.78]	0.5
	Elevated and decreasing (drops from 260 mg/dL to 190 mg/dL over time)	2.06 [0.87, 4.92]	0.1	1.63 [0.86, 3.06]	0.1
	Very elevated and decreasing (drops from 285 mg/dL to 240 mg/dL over time)	3.63 [1.54, 8.57]	0.003	2.38 [1.14, 4.97]	0.02
HDL Cholesterol‡	Very low and stable (35-40 mg/dL)	4.95 [2.39, 10.27]	<0.0001	3.53 [1.98, 6.28]	<0.0001
	Low and stable (45-50 mg/dL)	3.22 [1.64, 6.32]	0.0007	2.27 [1.35, 3.83]	0.002
	Borderline (55-60 mg/dL)	1.62 [0.80, 3.28]	0.18	1.66 [0.97, 2.81]	0.06
	High and increasing (increases from 70/80 mg/dL to 75/100 mg/dL over time)	1.00	---	1.00	---
LDL Cholesterol	Optimal (80-90 mg/dL)	1.00	---	1.00	---
	Borderline (115-120 mg/dL)	2.96 [1.27, 6.93]	0.01	1.15 [0.69, 1.91]	0.6
	Slightly elevated and decreasing (drops from 145 mg/dL to 125 mg/dL over time)	4.12 [1.76, 9.63]	0.001	1.47 [0.89, 2.43]	0.1
	Elevated and decreasing (drops from 170 mg/dL to 135 mg/dL over time)	2.92 [1.13, 7.52]	0.03	2.32 [1.31, 4.09]	0.004
	Very elevated and decreasing (drops from 220 mg/dL to 155 mg/dL over time)	5.11 [1.57, 16.69]	0.007	4.33 [1.96, 9.57]	0.0003

Log Triglycerides	Optimal (55-70 mg/dL)	1.00	---	1.00	---
	Borderline (81-99 mg/dL)	1.35 [0.84, 2.16]	0.2	0.99 [0.69, 1.40]	0.9
	Elevated (134-164 mg/dL)	1.83 [1.12, 3.01]	0.02	1.04 [0.69, 1.56]	0.9
	Very Elevated (245-314 mg/dL)	1.82 [0.83, 4.02]	0.1	0.78 [0.36, 1.68]	0.5
Non-HDL Cholesterol	Optimal (100-115 mg/dL)	1.00	---	1.00	---
	Borderline (145-137 mg/dL)	3.36 [1.78, 6.37]	0.0002	1.40 [0.95, 2.08]	0.09
	Elevated and Decreasing (drops from 185 mg/dL to 157 mg/dL over time)	3.15 [1.57, 6.31]	0.001	1.63 [1.03, 2.59]	0.04
	Very elevated and decreasing (drops from 235 mg/dL to 180 mg/dL over time)	4.57 [1.96, 10.65]	0.0004	3.80 [2.06, 7.01]	<0.0001

*CI – confidence interval; ASCVD – atherosclerotic cardiovascular disease; HDL – high-density lipoprotein; LDL – low-density lipoprotein.

† All models were adjusted for statin use, smoking status, diabetes status, body mass index, systolic blood pressure, total caloric intake, alcohol consumption, physical activity index, and antihypertensive medication use.

‡ HDL Trajectory Groups 4 & 5 were combined for analyses to increase statistical power since there were only 2 incident ASCVD events and 5 deaths in group 5.

Table S7. Rates and Risk of Heart Failure by Lipid Trajectory Group.

Lipid	Group	Events / no. at risk (%)	Hazard Ratio [95% CI]†	p-value
Total Cholesterol	Optimal (155-165 mg/dL)	13/546 (2.38)	1.00	---
	Borderline (190-200 mg/dL)	34/1053 (3.23)	1.47 [0.70, 3.07]	0.3
	Elevated (220-235 mg/dL)	12/581 (2.07)	1.17 [0.48, 2.85]	0.7
	Elevated and decreasing (drops from 260 mg/dL to 190 mg/dL over time)	2/123 (1.63)	1.30 [0.22, 7.68]	0.8
	Very elevated and decreasing (drops from 285 mg/dL to 240 mg/dL over time)	4/72 (5.56)	2.47[0.55, 11.14]	0.2
HDL Cholesterol‡	Very low and stable (35-40 mg/dL)	20/462 (4.33)	2.65 [0.78, 8.96]	0.1
	Low and stable (45-50 mg/dL)	25/779 (3.21)	2.41 [0.79, 7.34]	0.1
	Borderline (55-60 mg/dL)	15/687 (2.18)	2.00 [0.65, 6.18]	0.2
	High and increasing (increases from 70/80 mg/dL to 75/100 mg/dL over time)	4/425 (0.94)	1.00	---
LDL Cholesterol	Optimal (80-90 mg/dL)	4/317 (1.26)	1.00	---
	Borderline (115-120 mg/dL)	21/821 (2.56)	1.74 [0.58, 5.23]	0.3
	Slightly elevated and decreasing (drops from 145 mg/dL to 125 mg/dL over time)	22/713 (3.09)	2.13 [0.71, 6.41]	0.2
	Elevated and decreasing (drops from 170 mg/dL to 135 mg/dL over time)	8/296 (2.70)	1.83 [0.48, 6.95]	0.4
	Very elevated and decreasing (drops from 220 mg/dL to 155 mg/dL over time)	2/45 (4.44)	4.54[0.75, 27.30]	0.1

Log Triglycerides	Optimal (55-70 mg/dL)	13/576 (2.26)	1.00	---
	Borderline (81-99 mg/dL)	25/997 (2.51)	0.80 [0.40, 1.62]	0.5
	Elevated (134-164 mg/dL)	17/537 (3.17)	0.68 [0.29, 1.58]	0.4
	Very Elevated (245-314 mg/dL)	2/95 (2.11)	0.38 [0.08, 1.76]	0.2
Non-HDL Cholesterol	Optimal (100-115 mg/dL)	7/534 (1.31)	1.00	---
	Borderline (145-137 mg/dL)	35/1044 (3.35)	1.80 [0.75, 4.30]	0.2
	Elevated and Decreasing drops from 185 mg/dL to 157 mg/dL over time)	9/537 (1.68)	0.96 [0.32, 2.88]	0.9
	Very elevated and decreasing (drops from 235 mg/dL to 180 mg/dL over time)	6/92 (6.52)	3.53[0.99, 12.46]	0.05

*CI – confidence interval; HDL – high-density lipoprotein; LDL – low-density lipoprotein.

† All models were adjusted for statin use, smoking status, diabetes status, body mass index, and systolic blood pressure. Alcohol consumption was also adjusted for in total cholesterol, HDL-C and LDL-C models. Total caloric intake was adjusted for in LDL-C and triglyceride models. Physical activity index was adjusted for in HDL-C, triglyceride, and non-HDL-C models. Use of antihypertensive medications were adjusted for in total cholesterol, LDL-C and triglyceride models. Baseline hazards were allowed to differ for men and women in all models.

‡ HDL Trajectory Groups 4 & 5 were combined for analyses to increase statistical power since there were only 2 incident CVD events and 5 deaths in group 5.

Figure S1. Timeline and Sample selection.

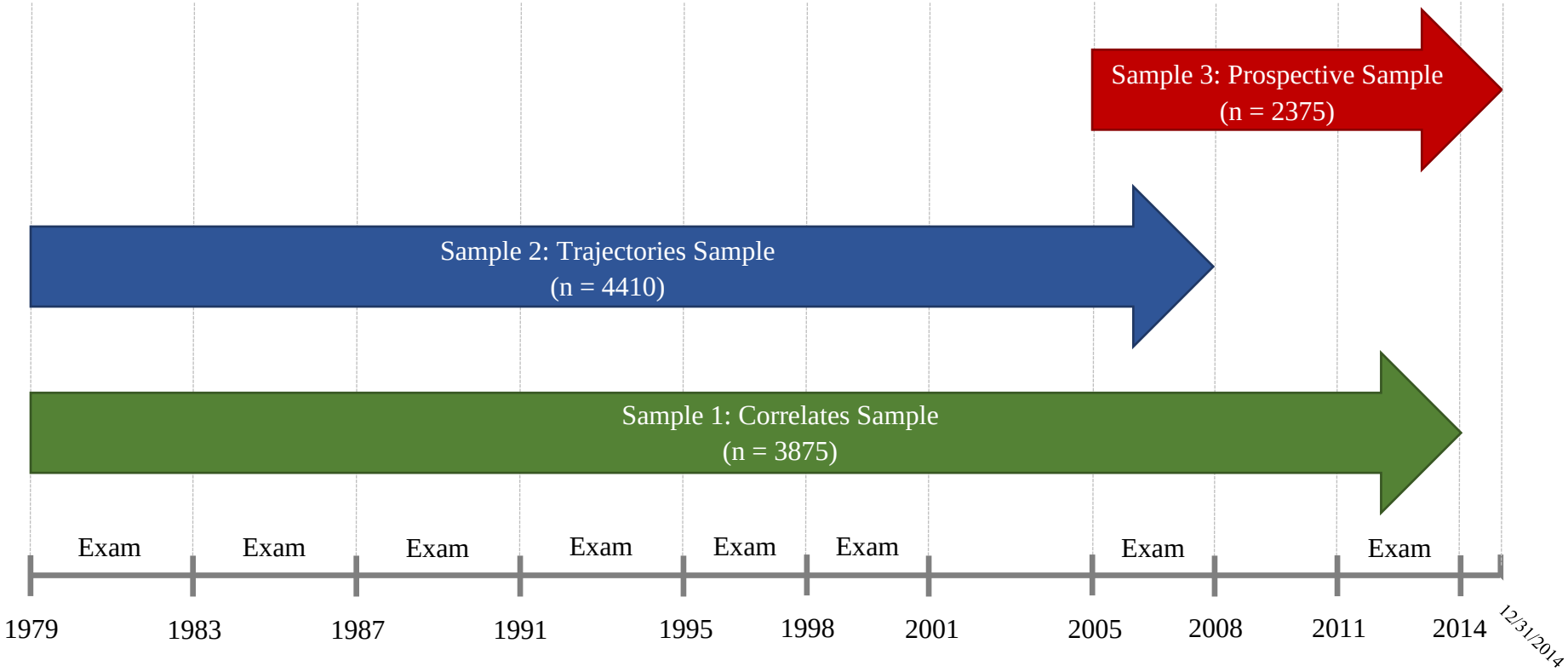
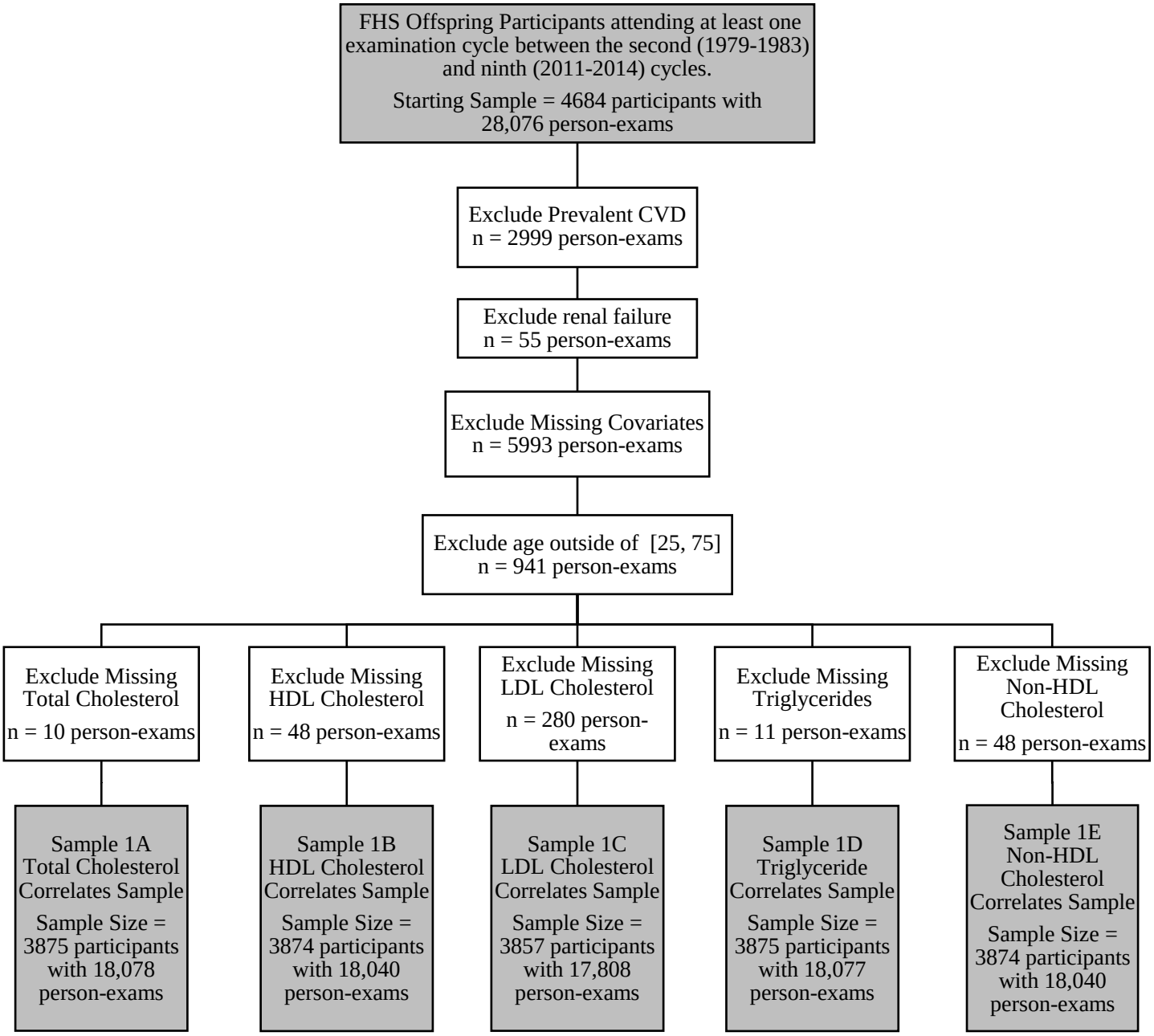
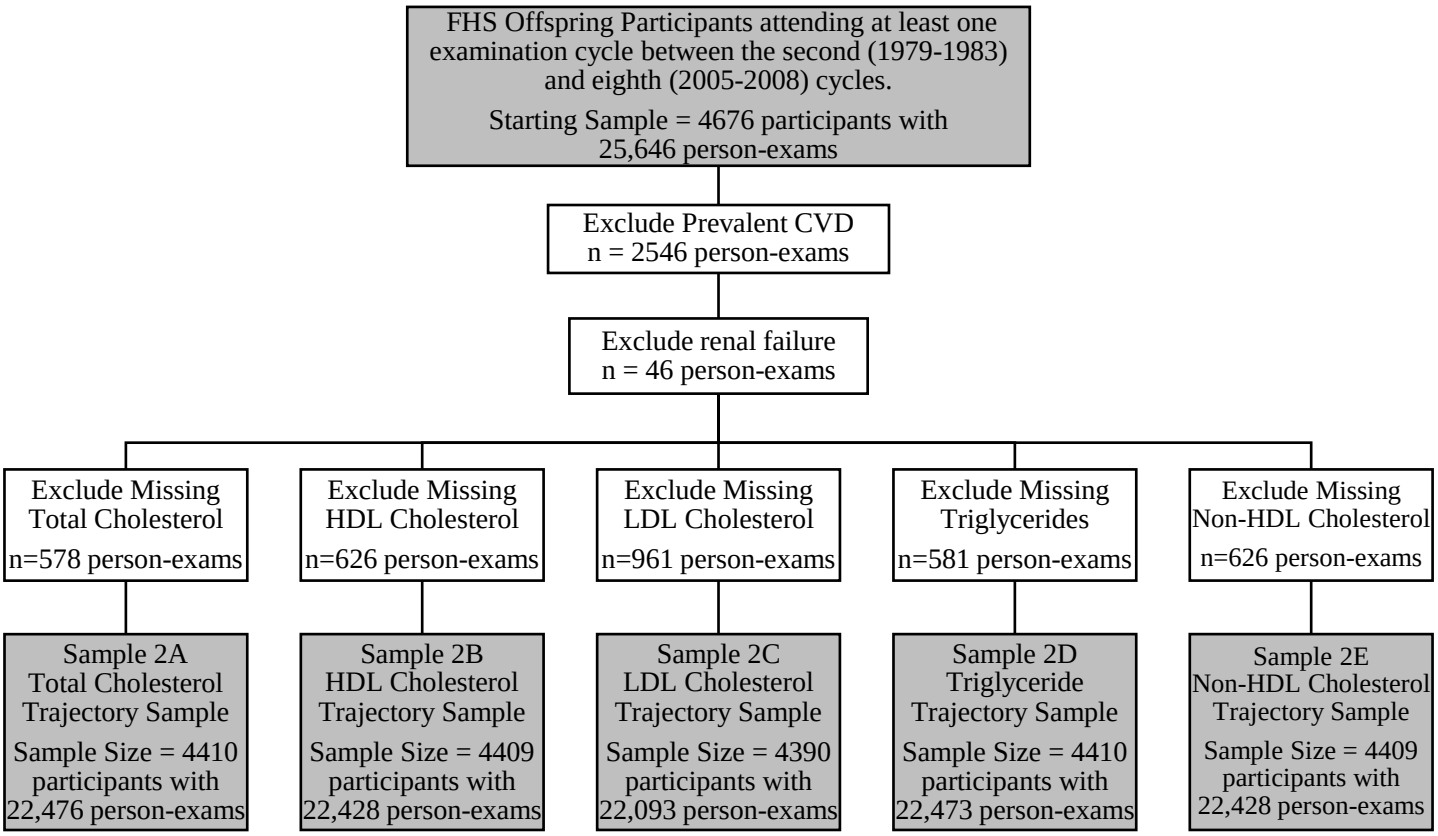


Figure S2. Generation of samples used to assess the correlates of the lipids under study.*



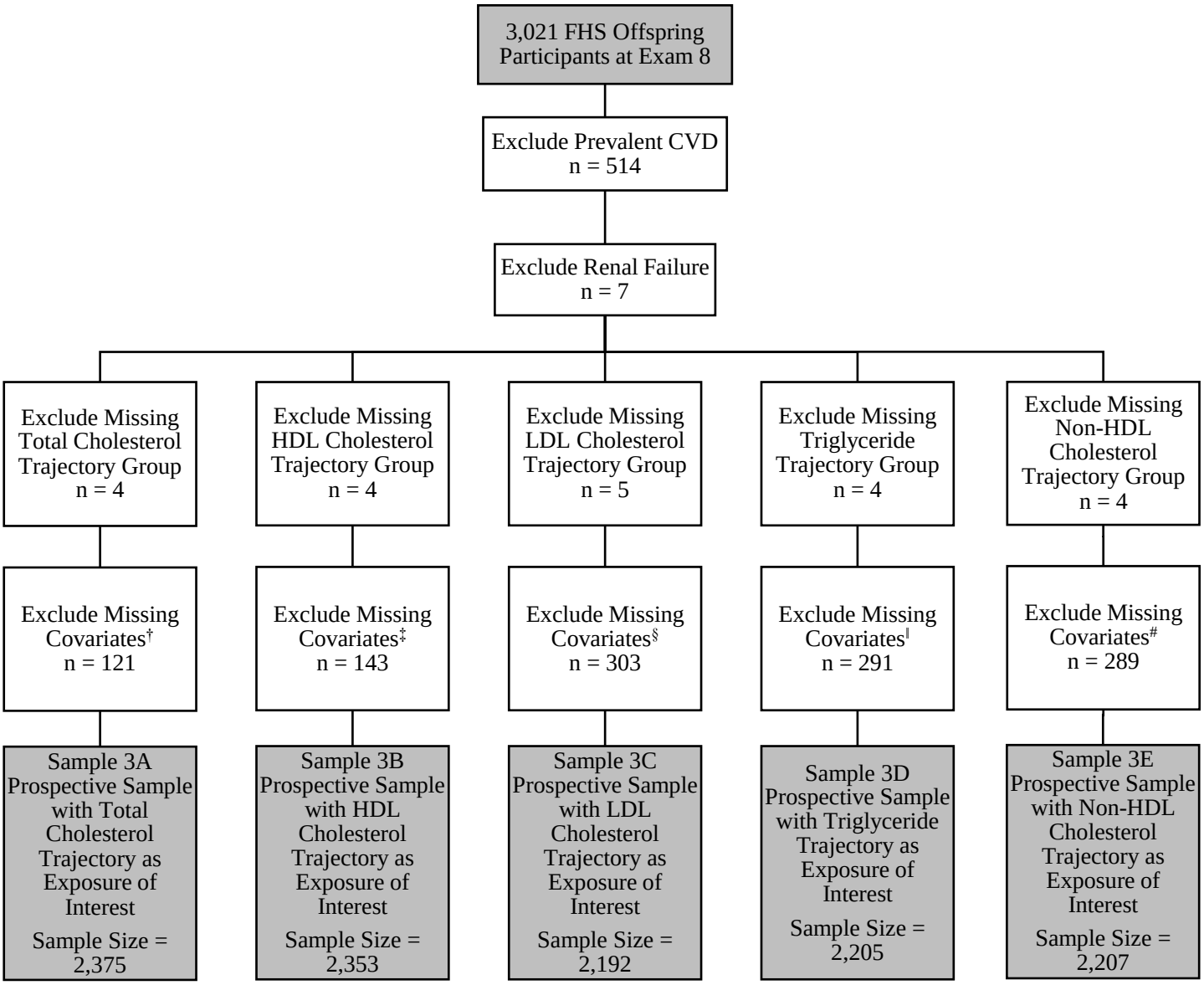
*CVD – cardiovascular disease; FHS – Framingham Heart Study; HDL – high-density lipoprotein; LDL – low-density lipoprotein.

Figure S3. Generation of samples used to create trajectories of lipids.*



*CVD – cardiovascular disease; FHS – Framingham Heart Study; HDL – high-density lipoprotein; LDL – low-density lipoprotein.

Figure S4. Generation of samples used for incidence analyses.*



*CVD – cardiovascular disease; FHS – Framingham Heart Study; HDL – high-density lipoprotein; LDL – low-density lipoprotein.

† Covariates: Lipid-lowering medication, smoking status, diabetes, body mass index, systolic blood pressure, moderate-to-heavy drinking, and antihypertensive medication

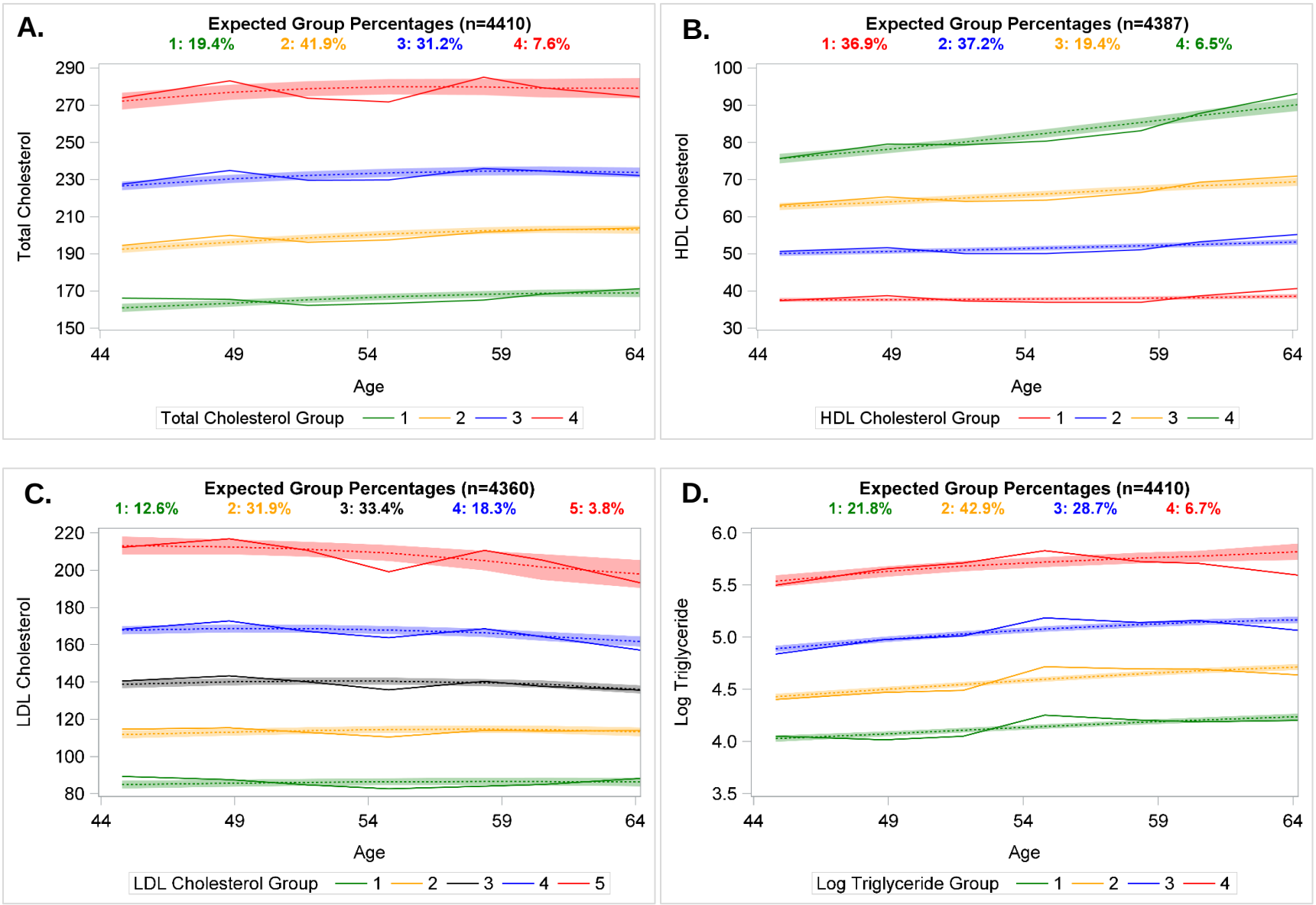
‡ Covariates: Lipid-lowering medication, smoking status, diabetes, body mass index, systolic blood pressure, moderate-to-heavy drinking, and physical activity index

§ Covariates: Lipid-lowering medication, smoking status, diabetes, body mass index, systolic blood pressure, moderate-to-heavy drinking, total caloric intake, and antihypertensive medication

‖ Covariates: Lipid-lowering medication, smoking status, diabetes, body mass index, systolic blood pressure, total caloric intake, physical activity index, and antihypertensive medication

Covariates: Lipid-lowering medication, smoking status, diabetes, body mass index, systolic blood pressure, total caloric intake, and physical activity index

Figure S5. Lipid Trajectory Plots among participants not on lipid-lowering treatment.



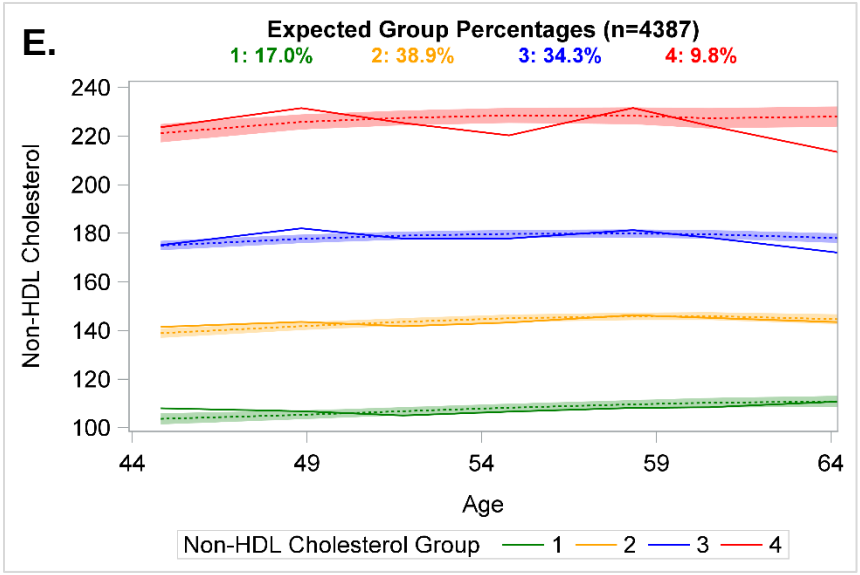
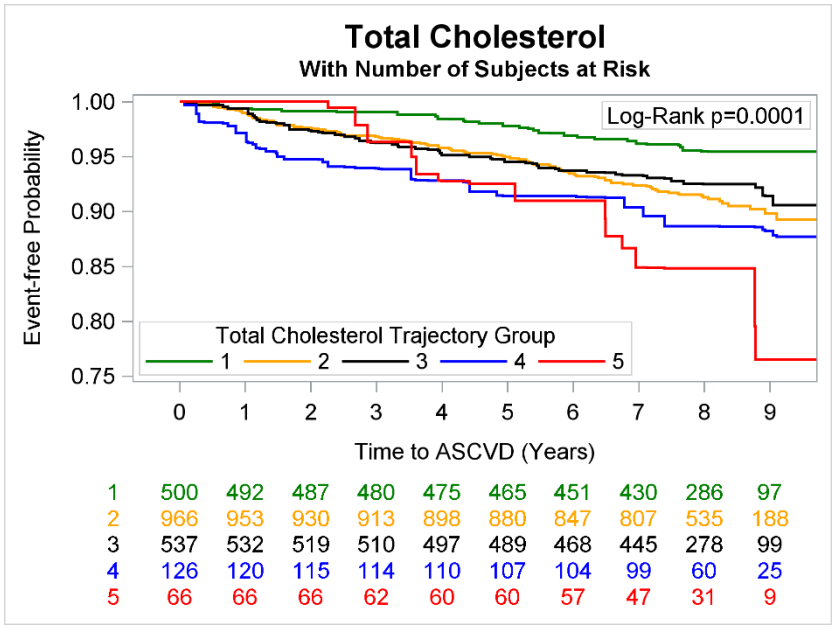
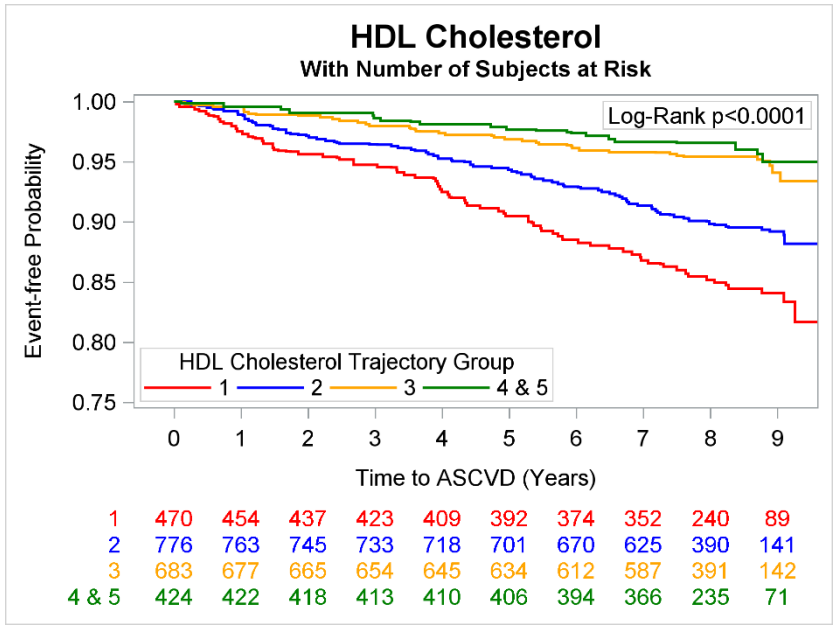
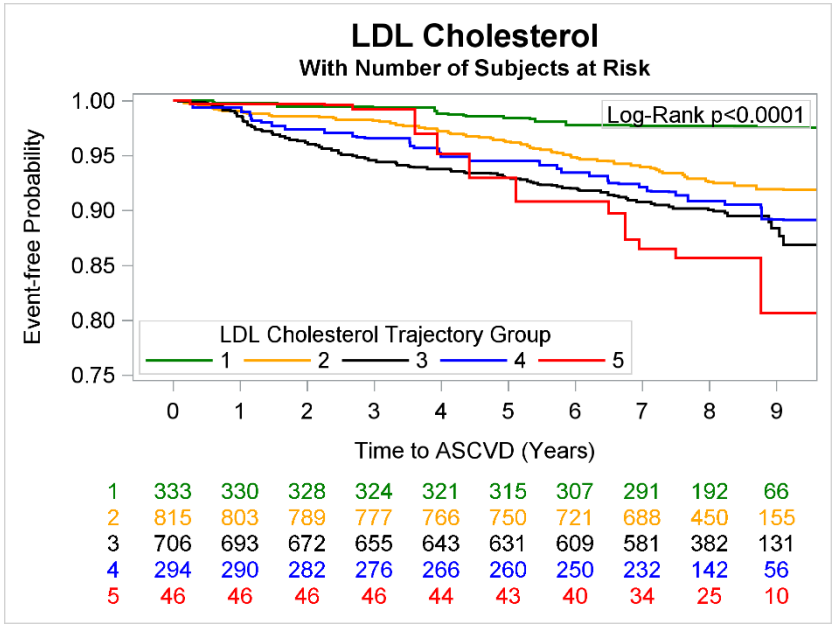
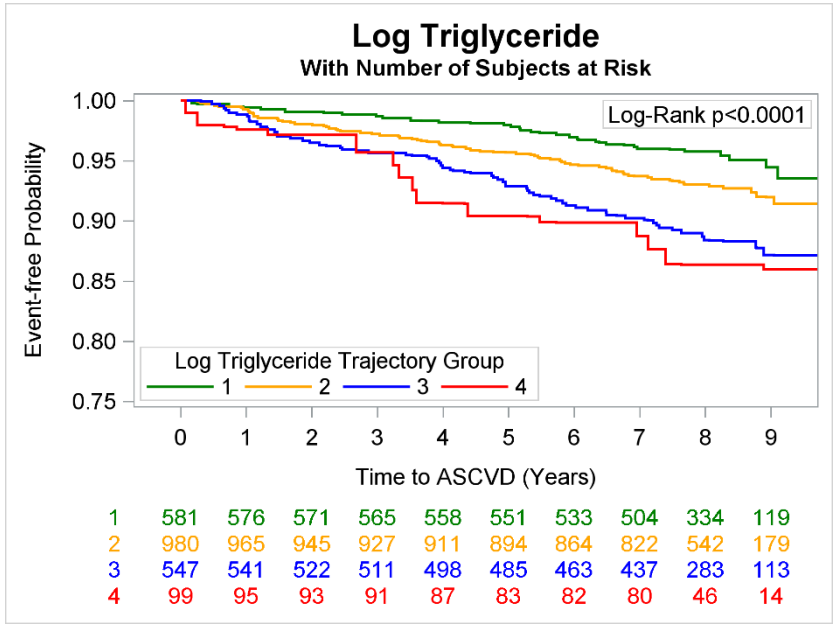

E.
Expected Group Percentages (n=4387)
1: 17.0%
2: 38.9%
3: 34.3%
4: 9.8%
Non-HDL Cholesterol
240
220
200
180
160
140
120
100
44
49
54
59
64
Age
Non-HDL Cholesterol Group
1
2
3
4

Figure S6. Kaplan-Meier Curves for ASCVD Stratified by Trajectory Groups.









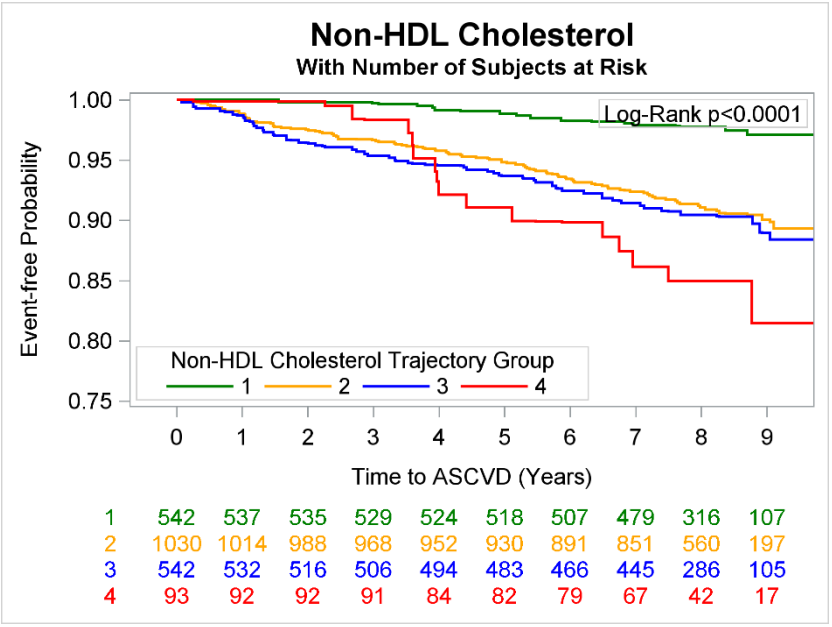
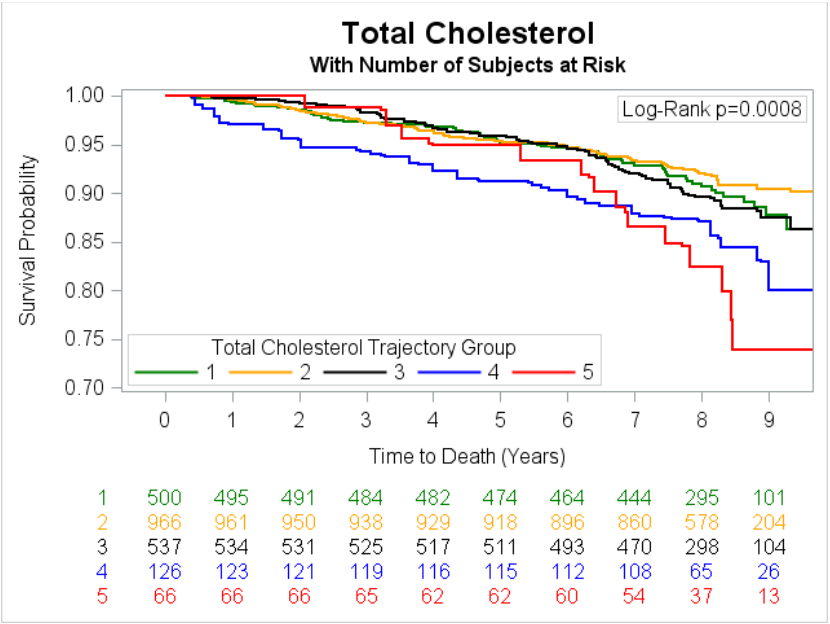
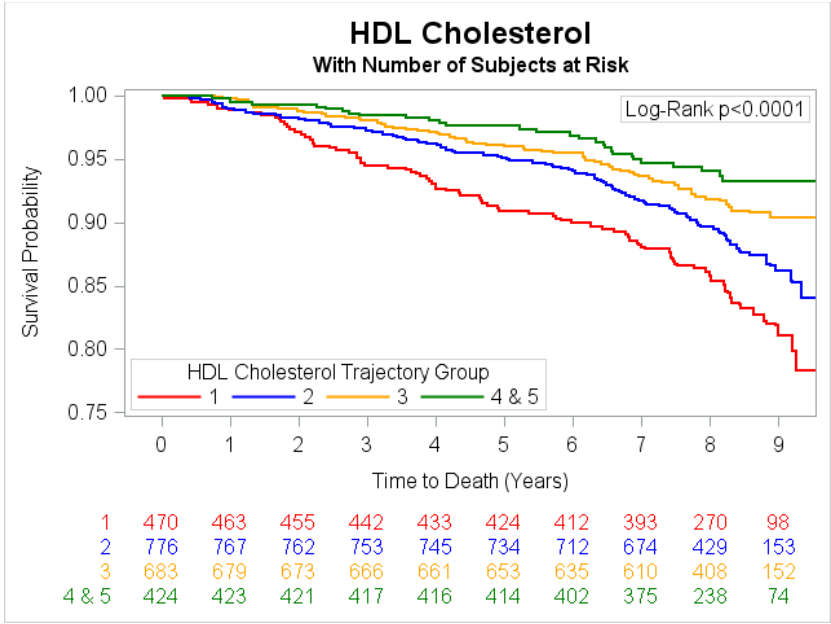
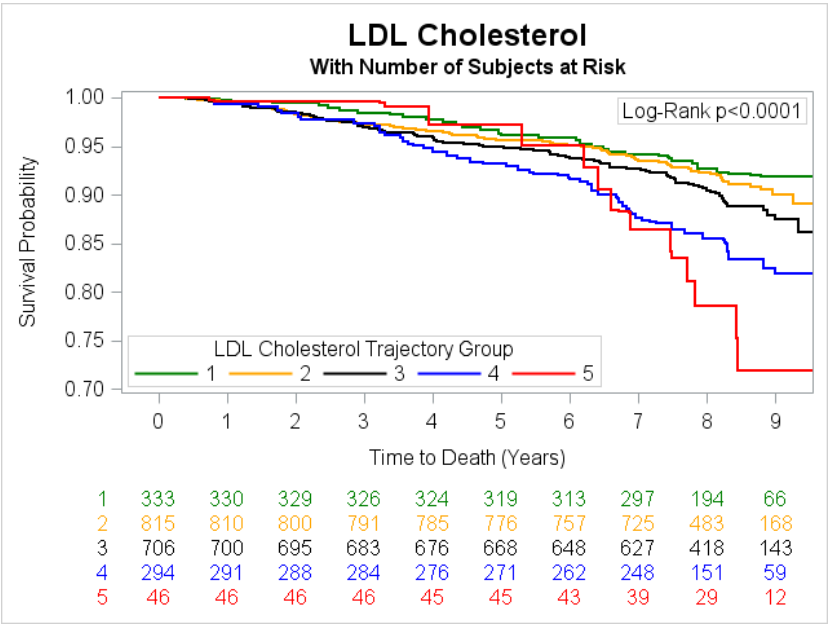
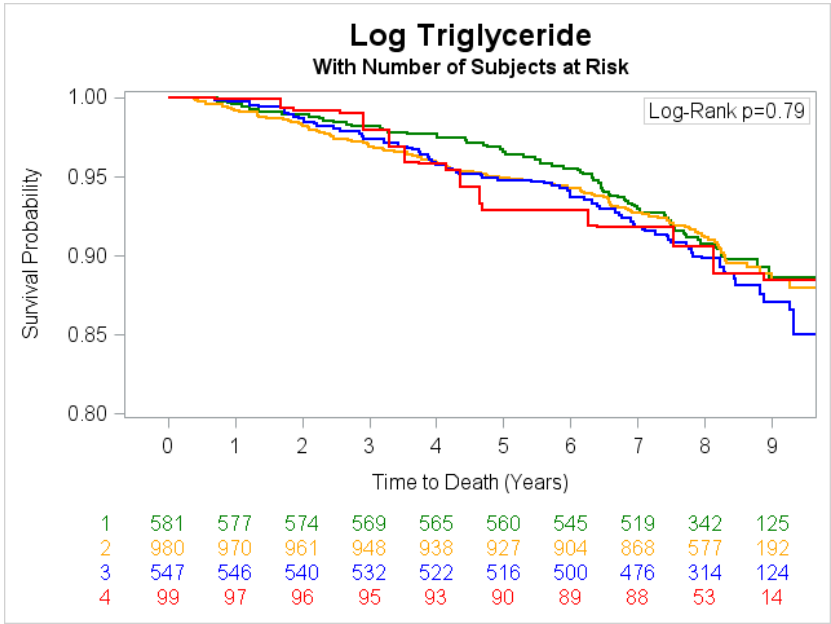

Non-HDL Cholesterol
With Number of Subjects at Risk
Log-Rank p<0.0001
Event-free Probability
1.00
0.95
0.90
0.85
0.80
0.75
Non-HDL Cholesterol Trajectory Group
1
2
3
4
0 1 2 3 4 5 6 7 8 9
Time to ASCVD (Years)
1 542 537 535 529 524 518 507 479 316 107
2 1030 1014 988 968 952 930 891 851 560 197
3 542 532 516 506 494 483 466 445 286 105
4 93 92 92 91 84 82 79 67 42 17

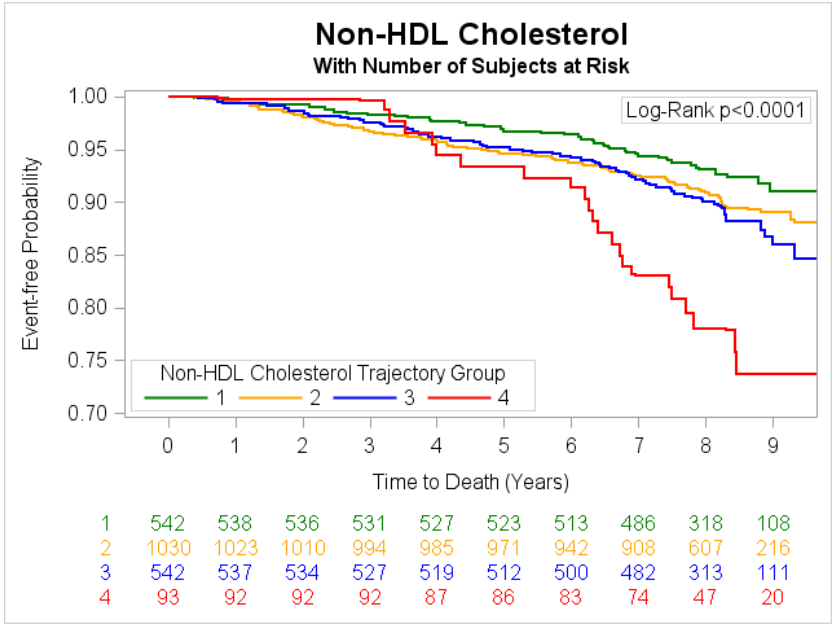
Figure S7. Kaplan-Meier Curves for All-Cause Mortality Stratified by Trajectory Groups.










Non-HDL Cholesterol
With Number of Subjects at Risk
Log-Rank p<0.0001
Event-free Probability
1.00
0.95
0.90
0.85
0.80
0.75
0.70
Non-HDL Cholesterol Trajectory Group
1
2
3
4
0
1
2
3
4
5
6
7
8
9
Time to Death (Years)
1 542 538 536 531 527 523 513 486 318 108
2 1030 1023 1010 994 985 971 942 908 607 216
3 542 537 534 527 519 512 500 482 313 111
4 93 92 92 92 87 86 83 74 47 20