```
 1 .
 2 .
 3 . **STEP 16: COX PH MODEL OF DEMENTIA STATUS VS. MORTALITY BY SLEEP TERTILE****
 4 .
 5 . capture drop poorsleep_2006tert

 6 . xtile poorsleep_2006tert=poorsleep_2006 if sample_final==1,nq(3)

 7 .
 8 . save, replace
   file C:\Users\baydounm\AppData\Local\Temp\ST_6434_000002.tmp saved as .dta format

 9 .
10 . **********************FIRST POOR SLEEP QUALITY TERTILE************************************
11 .
12 . ***MODEL 1****
13 . foreach x of varlist  lnhurd_odds lnexpert_odds lnlasso_odds {
     2. mi estimate: svy, subpop(sample_final): stcox `x' AGE2006 SEX NonWhite if poorsleep_2006tert==1
     3.
14 . }
```

Multiple-imputation estimates — Imputations = 5
Survey: Cox regression — Number of obs = 2,359

Number of strata = 52 — Population size = 7,547,987
Number of PSUs = 104 — Subpop. no. obs = 2,286
Subpop. size = 7,545,292
Average RVI = 0.0000
Largest FMI = 0.0000
Complete DF = 52
DF adjustment: Small sample — DF: min = 50.11
avg = 50.11
max = 50.11
Model F test: Equal FMI — F(4, 50.1) = 286.37
Within VCE type: Linearized — Prob > F = 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lnhurd_odds	.0828293	.0116425	7.11	0.000	.0594459	.1062128
AGE2006	.094097	.0052184	18.03	0.000	.0836161	.104578
SEX	-.2995515	.0540068	-5.55	0.000	-.4080215	-.1910814
NonWhite	.1069629	.0740935	1.44	0.155	-.0418503	.255776

Multiple-imputation estimates — Imputations = 5
Survey: Cox regression — Number of obs = 2,359

Number of strata = 52 — Population size = 7,547,987
Number of PSUs = 104 — Subpop. no. obs = 2,286
Subpop. size = 7,545,292
Average RVI = 0.0000
Largest FMI = 0.0000
Complete DF = 52
DF adjustment: Small sample — DF: min = 50.11
avg = 50.11
max = 50.11
Model F test: Equal FMI — F(4, 50.1) = 207.48
Within VCE type: Linearized — Prob > F = 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lnexpert_odds	.1575301	.0157707	9.99	0.000	.1258554	.1892049
AGE2006	.0777621	.0045376	17.14	0.000	.0686486	.0868756
SEX	-.2879804	.0525384	-5.48	0.000	-.3935012	-.1824595
NonWhite	.0542545	.0737002	0.74	0.465	-.0937688	.2022779

Multiple-imputation estimates — Imputations = 5
Survey: Cox regression — Number of obs = 2,359

Number of strata = 52 — Population size = 7,547,987
Number of PSUs = 104 — Subpop. no. obs = 2,286
Subpop. size = 7,545,292
Average RVI = 0.0000
Largest FMI = 0.0000
Complete DF = 52
DF adjustment: Small sample — DF: min = 50.11
avg = 50.11
max = 50.11
Model F test: Equal FMI — F(4, 50.1) = 243.06
Within VCE type: Linearized — Prob > F = 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lnlasso_odds	.2041589	.018373	11.11	0.000	.1672576	.2410601
AGE2006	.0827758	.0044671	18.53	0.000	.0738039	.0917477
SEX	-.3319493	.0532864	-6.23	0.000	-.4389723	-.2249262
NonWhite	.0626124	.0727457	0.86	0.394	-.0834938	.2087185

```
15 .
16 . foreach x of varlist  hurd_dem expert_dem lasso_dem {
     2. mi estimate: svy, subpop(sample_final): stcox `x' AGE2006 SEX NonWhite if poorsleep_2006tert==1
     3.
17 . }
```

Multiple-imputation estimates — Imputations = 5
Survey: Cox regression — Number of obs = 2,359

Number of strata = 52 — Population size = 7,547,987
Number of PSUs = 104 — Subpop. no. obs = 2,286
Subpop. size = 7,545,292
Average RVI = 0.0000
Largest FMI = 0.0000
Complete DF = 52
DF adjustment: Small sample — DF: min = 50.11
avg = 50.11
max = 50.11
Model F test: Equal FMI — F(4, 50.1) = 223.07
Within VCE type: Linearized — Prob > F = 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
hurd_dem	.8009342	.1010376	7.93	0.000	.5980052	1.003863
AGE2006	.0977693	.0045951	21.28	0.000	.0885403	.1069982
SEX	-.2990727	.0604214	-4.95	0.000	-.4204261	-.1777193
NonWhite	.1694467	.0731192	2.32	0.025	.0225905	.3163029

```
Multiple-imputation estimates                 Imputations       =          5
Survey: Cox regression                        Number of obs     =      2,359

Number of strata  =        52                 Population size   =  7,547,987
Number of PSUs    =       104                 Subpop. no. obs   =      2,286
                                              Subpop. size      =  7,545,292
                                              Average RVI       =     0.0000
                                              Largest FMI       =     0.0000
                                              Complete DF       =         52
DF adjustment:   Small sample                 DF:     min       =      50.11
                                                      avg       =      50.11
                                                      max       =      50.11
Model F test:       Equal FMI                 F(   4,   50.1)   =     256.25
Within VCE type:   Linearized                 Prob > F          =     0.0000
```

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
expert_dem	.8364403	.0940095	8.90	0.000	.6476269	1.025254
AGE2006	.0999125	.0041492	24.08	0.000	.0915791	.1082459
SEX	-.333504	.0552394	-6.04	0.000	-.4444495	-.2225585
NonWhite	.1850374	.0731205	2.53	0.015	.0381784	.3318963

```
Multiple-imputation estimates                 Imputations       =          5
Survey: Cox regression                        Number of obs     =      2,359

Number of strata  =        52                 Population size   =  7,547,987
Number of PSUs    =       104                 Subpop. no. obs   =      2,286
                                              Subpop. size      =  7,545,292
                                              Average RVI       =     0.0000
                                              Largest FMI       =     0.0000
                                              Complete DF       =         52
DF adjustment:   Small sample                 DF:     min       =      50.11
                                                      avg       =      50.11
                                                      max       =      50.11
Model F test:       Equal FMI                 F(   4,   50.1)   =     231.12
Within VCE type:   Linearized                 Prob > F          =     0.0000
```

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lasso_dem	.7169292	.0966747	7.42	0.000	.5227629	.9110956
AGE2006	.1001087	.0041668	24.03	0.000	.09174	.1084775
SEX	-.3147221	.0563759	-5.58	0.000	-.4279504	-.2014938
NonWhite	.1518014	.0733051	2.07	0.044	.0045718	.299031

```
18 .
19 .
20 . ***MODEL 2****
```

```
21 . foreach x of varlist  lnhurd_odds lnexpert_odds lnlasso_odds {
  2. mi estimate: svy, subpop(sample_final): stcox `x' AGE2006 SEX NonWhite i.education  i.totwealth_2006 i.marit
> 06 cesd_2006 if poorsleep_2006tert==1
  3.
22 . }
```

Multiple-imputation estimates — Imputations = 5
Survey: Cox regression — Number of obs = 2,219

Number of strata = 52 — Population size = 7,120,980
Number of PSUs = 104 — Subpop. no. obs = 2,146
Subpop. size = 7,118,285
Average RVI = 0.0037
Largest FMI = 0.0534
Complete DF = 52
DF adjustment: Small sample — DF: min = 46.31
avg = 49.93
max = 50.11
Model F test: Equal FMI — F(24, 50.1) = 75.88
Within VCE type: Linearized — Prob > F = 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lnhurd_odds	.1193103	.016182	7.37	0.000	.0868095	.1518111
AGE2006	.0802203	.0061725	13.00	0.000	.0678229	.0926177
SEX	-.2771077	.0550844	-5.03	0.000	-.3877437	-.1664716
NonWhite	-.1283458	.1042288	-1.23	0.224	-.3376874	.0809958
education						
2	-.5375005	.2471111	-2.18	0.034	-1.033814	-.0411875
3	-.0711042	.0940189	-0.76	0.453	-.2599367	.1177284
4	-.1199021	.1195611	-1.00	0.321	-.3600351	.1202309
5	-.0696661	.1183273	-0.59	0.559	-.3073209	.1679887
totwealth_2006						
2	-.0615823	.0653367	-0.94	0.350	-.1928088	.0696443
3	.0240596	.1772872	0.14	0.893	-.3320153	.3801346
4	-.5014779	.5587621	-0.90	0.374	-1.623774	.6208178
5	-1.463807	1.252353	-1.17	0.248	-3.979104	1.051489
marital_2006						
2	-.026711	.2022057	-0.13	0.895	-.4328316	.3794095
3	.1586049	.2551438	0.62	0.537	-.3538414	.6710512
4	.1322931	.2179834	0.61	0.547	-.3055165	.5701028
work_st_2006	-.028063	.0922697	-0.30	0.762	-.2133828	.1572568
smoking_2006						
2	.2988943	.0622502	4.80	0.000	.1738655	.423923
3	.5858449	.0910036	6.44	0.000	.4026968	.7689931
physic_act_2006	-.2377736	.0383267	-6.20	0.000	-.3147522	-.160795
2.srh_2006	.3000716	.0768269	3.91	0.000	.1457627	.4543805
bmibr_2006						
2	-.2070267	.0689711	-3.00	0.004	-.3455531	-.0685002
3	-.2256847	.0878017	-2.57	0.013	-.4020312	-.0493382
cardiometcondbr_2006	.3024941	.0427549	7.08	0.000	.2166226	.3883657
cesd_2006	-.0165507	.0267887	-0.62	0.539	-.0703559	.0372544

Multiple-imputation estimates — Imputations = 5
Survey: Cox regression — Number of obs = 2,219

Number of strata = 52
Number of PSUs = 104
Population size = 7,120,980
Subpop. no. obs = 2,146
Subpop. size = 7,118,285
Average RVI = 0.0035
Largest FMI = 0.0521
Complete DF = 52
DF adjustment: Small sample
DF: min = 46.42
avg = 49.93
max = 50.11
Model F test: Equal FMI
F(24, 50.1) = 82.87
Within VCE type: Linearized
Prob > F = 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lnexpert_odds	.1225124	.0147514	8.31	0.000	.0928848	.15214
AGE2006	.0795017	.0058844	13.51	0.000	.0676831	.0913203
SEX	-.2773791	.0562382	-4.93	0.000	-.3903321	-.164426
NonWhite	-.0876248	.1025041	-0.85	0.397	-.2935026	.118253
education						
2	-.445415	.2315976	-1.92	0.060	-.9105708	.0197407
3	-.0282831	.0940127	-0.30	0.765	-.2171036	.1605374
4	-.112065	.1194628	-0.94	0.353	-.3520005	.1278705
5	-.0476726	.1198461	-0.40	0.692	-.2883778	.1930326
totwealth_2006						
2	-.0648814	.0657539	-0.99	0.329	-.1969461	.0671834
3	.0026423	.1801386	0.01	0.988	-.3591597	.3644444
4	-.5323462	.5353719	-0.99	0.325	-1.607693	.5430001
5	-1.535115	1.262231	-1.22	0.230	-4.070251	1.000021
marital_2006						
2	-.0201862	.2011978	-0.10	0.920	-.4242825	.3839101
3	.1438064	.2519541	0.57	0.571	-.362234	.6498467
4	.1197619	.2154118	0.56	0.581	-.3128827	.5524066
work_st_2006	-.0487283	.0921429	-0.53	0.599	-.2337935	.1363368
smoking_2006						
2	.3178218	.0617383	5.15	0.000	.1938219	.4418217
3	.5665627	.0955701	5.93	0.000	.3742376	.7588879
physic_act_2006	-.2299033	.039229	-5.86	0.000	-.3086938	-.1511128
2.srh_2006	.2856286	.0747675	3.82	0.000	.1354561	.4358012
bmibr_2006						
2	-.203903	.0705822	-2.89	0.006	-.3456655	-.0621406
3	-.2166308	.0890096	-2.43	0.019	-.395403	-.0378587
cardiometcondbr_2006	.2833655	.0448392	6.32	0.000	.1933079	.373423
cesd_2006	-.0149922	.0269088	-0.56	0.580	-.0690385	.0390542

Multiple-imputation estimates — Imputations = 5
Survey: Cox regression — Number of obs = 2,219

Number of strata	= 52	Population size	= 7,120,980
Number of PSUs	= 104	Subpop. no. obs	= 2,146
		Subpop. size	= 7,118,285
		Average RVI	= 0.0042
		Largest FMI	= 0.0609
		Complete DF	= 52
DF adjustment:	Small sample	DF: min	= 45.59
		avg	= 49.90
		max	= 50.11
Model F test:	Equal FMI	F(24, 50.1)	= 74.73
Within VCE type:	Linearized	Prob > F	= 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lnlasso_odds	.172589	.0198479	8.70	0.000	.1327254	.2124525
AGE2006	.0816414	.0058126	14.05	0.000	.0699669	.0933159
SEX	-.3332008	.0567754	-5.87	0.000	-.4472331	-.2191685
NonWhite	-.0794623	.103077	-0.77	0.444	-.2864909	.1275663
education						
2	-.408676	.2416285	-1.69	0.097	-.893978	.0766261
3	.0031431	.0971284	0.03	0.974	-.1919349	.1982212
4	-.0609716	.1199805	-0.51	0.614	-.3019469	.1800038
5	-.0061563	.1201871	-0.05	0.959	-.2475465	.235234
totwealth_2006						
2	-.0581499	.0659371	-0.88	0.382	-.1905827	.0742829
3	.0138243	.176601	0.08	0.938	-.3408731	.3685216
4	-.5319828	.5400022	-0.99	0.329	-1.616628	.5526627
5	-1.567597	1.245743	-1.26	0.214	-4.069619	.9344253
marital_2006						
2	-.0170036	.1993774	-0.09	0.932	-.417444	.3834367
3	.1766336	.2492497	0.71	0.482	-.3239752	.6772425
4	.1538935	.2137449	0.72	0.475	-.2754033	.5831903
work_st_2006	-.0335864	.0888569	-0.38	0.707	-.2120518	.144879
smoking_2006						
2	.3129818	.0634495	4.93	0.000	.185545	.4404186
3	.5913706	.0922451	6.41	0.000	.405646	.7770953
physic_act_2006	-.221112	.0386113	-5.73	0.000	-.2986621	-.1435618
2.srh_2006	.3036222	.0756653	4.01	0.000	.1516452	.4555993
bmibr_2006						
2	-.1739126	.0704789	-2.47	0.017	-.3154676	-.0323575
3	-.1558218	.0897457	-1.74	0.089	-.3360723	.0244288
cardiometcondbr_2006	.2908046	.0428723	6.78	0.000	.2046975	.3769117
cesd_2006	-.0177527	.0270529	-0.66	0.515	-.0720888	.0365834

```
23 .
24 .
25 . foreach x of varlist  hurd_dem expert_dem lasso_dem {
  2. mi estimate: svy, subpop(sample_final): stcox `x' AGE2006 SEX NonWhite i.education  i.totwealth_2006 i.marit
> 06 cesd_2006 if poorsleep_2006tert==1
  3.
26 . }
```

Multiple-imputation estimates — Imputations = 5
Survey: Cox regression — Number of obs = 2,219

Number of strata = 52 — Population size = 7,120,980
Number of PSUs = 104 — Subpop. no. obs = 2,146
Subpop. size = 7,118,285
Average RVI = 0.0028
Largest FMI = 0.0384
Complete DF = 52
DF adjustment: Small sample — DF: min = 47.63
avg = 49.98
max = 50.11
Model F test: Equal FMI — F(24, 50.1) = 68.81
Within VCE type: Linearized — Prob > F = 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
hurd_dem	.5736629	.0969152	5.92	0.000	.3790119	.7683139
AGE2006	.093363	.0056399	16.55	0.000	.0820355	.1046906
SEX	-.3187553	.0602934	-5.29	0.000	-.4398536	-.1976569
NonWhite	-.025505	.10233	-0.25	0.804	-.2310336	.1800236
education						
2	-.461116	.2370937	-1.94	0.057	-.9373098	.0150778
3	-.0715502	.0960466	-0.74	0.460	-.2644552	.1213549
4	-.1558139	.1174873	-1.33	0.191	-.3917822	.0801543
5	-.1319699	.1193902	-1.11	0.274	-.3717598	.10782
totwealth_2006						
2	-.0889118	.0664301	-1.34	0.187	-.2223343	.0445108
3	.0052791	.1795546	0.03	0.977	-.3553499	.3659082
4	-.4528482	.5476046	-0.83	0.412	-1.552708	.6470118
5	-1.386014	1.18095	-1.17	0.246	-3.757899	.9858721
marital_2006						
2	.0054108	.1953969	0.03	0.978	-.3870348	.3978565
3	.1926466	.2463838	0.78	0.438	-.3022055	.6874988
4	.1435762	.2075629	0.69	0.492	-.2733044	.5604568
work_st_2006	-.1030055	.0942084	-1.09	0.279	-.292219	.0862081
smoking_2006						
2	.3000769	.0598588	5.01	0.000	.1798493	.4203044
3	.5606978	.1061948	5.28	0.000	.3471354	.7742602
physic_act_2006	-.2485582	.0397548	-6.25	0.000	-.3284051	-.1687113
2.srh_2006	.2848144	.0754891	3.77	0.000	.1331922	.4364366
bmibr_2006						
2	-.2310003	.0690484	-3.35	0.002	-.3696821	-.0923185
3	-.2580696	.0873093	-2.96	0.005	-.4334273	-.0827118
cardiometcondbr_2006	.3150733	.0428128	7.36	0.000	.2290855	.4010612
cesd_2006	-.0117958	.0265203	-0.44	0.658	-.0650615	.0414699

Multiple-imputation estimates — Imputations = 5
Survey: Cox regression — Number of obs = 2,219

Number of strata = 52
Number of PSUs = 104
Population size = 7,120,980
Subpop. no. obs = 2,146
Subpop. size = 7,118,285
Average RVI = 0.0026
Largest FMI = 0.0347
Complete DF = 52
DF adjustment: **Small sample**
DF: min = 47.93
avg = 49.99
max = 50.11
Model F test: **Equal FMI**
F(24, 50.1) = 64.22
Within VCE type: **Linearized**
Prob > F = 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
expert_dem	.6491357	.0769739	8.43	0.000	.4945337	.8037376
AGE2006	.0945829	.005389	17.55	0.000	.0837592	.1054067
SEX	-.3377561	.0571843	-5.91	0.000	-.4526095	-.2229028
NonWhite	-.0163289	.1051857	-0.16	0.877	-.2275914	.1949336
education						
2	-.4319968	.2356222	-1.83	0.073	-.9052353	.0412417
3	-.0364427	.0966852	-0.38	0.708	-.2306306	.1577452
4	-.139447	.1201803	-1.16	0.251	-.3808237	.1019297
5	-.1019624	.1170669	-0.87	0.388	-.3370857	.1331609
totwealth_2006						
2	-.0974191	.0670948	-1.45	0.153	-.2321764	.0373382
3	-.016882	.1823176	-0.09	0.927	-.38306	.3492961
4	-.5962359	.4964449	-1.20	0.235	-1.593417	.4009448
5	-1.379803	1.174851	-1.17	0.246	-3.739438	.9798329
marital_2006						
2	-.0089519	.1957246	-0.05	0.964	-.4020556	.3841517
3	.1651642	.2425482	0.68	0.499	-.3219841	.6523125
4	.1369846	.2073087	0.66	0.512	-.2793853	.5533546
work_st_2006	-.0913866	.0946392	-0.97	0.339	-.2814653	.0986922
smoking_2006						
2	.3206047	.0613731	5.22	0.000	.1973359	.4438736
3	.5729902	.1031755	5.55	0.000	.3655337	.7804467
physic_act_2006	-.2395364	.0393844	-6.08	0.000	-.3186392	-.1604336
2.srh_2006	.2898389	.0748696	3.87	0.000	.1394615	.4402163
bmibr_2006						
2	-.2274638	.0709985	-3.20	0.002	-.3700625	-.0848652
3	-.2289828	.084328	-2.72	0.009	-.3983527	-.0596128
cardiometcondbr_2006	.3089621	.0452715	6.82	0.000	.218036	.3998881
cesd_2006	-.0115992	.0256382	-0.45	0.653	-.0630931	.0398947

Multiple-imputation estimates — Imputations = 5
Survey: Cox regression — Number of obs = 2,219

Number of strata	= 52	Population size	= 7,120,980
Number of PSUs	= 104	Subpop. no. obs	= 2,146
		Subpop. size	= 7,118,285
		Average RVI	= 0.0027
		Largest FMI	= 0.0372
		Complete DF	= 52
DF adjustment:	Small sample	DF: min	= 47.73
		avg	= 49.99
		max	= 50.11
Model F test:	Equal FMI	F(24, 50.1)	= 59.14
Within VCE type:	Linearized	Prob > F	= 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lasso_dem	.5586021	.0885634	6.31	0.000	.3807249	.7364793
AGE2006	.0934577	.0054857	17.04	0.000	.0824399	.1044755
SEX	-.3437725	.0574572	-5.98	0.000	-.4591739	-.228371
NonWhite	-.0453626	.106666	-0.43	0.672	-.2595988	.1688737
education						
2	-.4400557	.2358191	-1.87	0.068	-.9136896	.0335781
3	-.0380983	.0962542	-0.40	0.694	-.2314205	.1552239
4	-.1402708	.1194693	-1.17	0.246	-.3802196	.099678
5	-.111049	.1173791	-0.95	0.349	-.3467995	.1247016
totwealth_2006						
2	-.1152749	.0657796	-1.75	0.086	-.2473908	.016841
3	-.0204574	.1837971	-0.11	0.912	-.3896071	.3486923
4	-.593345	.5037534	-1.18	0.244	-1.605176	.4184863
5	-1.375346	1.170779	-1.17	0.246	-3.726804	.9761108
marital_2006						
2	.0107729	.1954029	0.06	0.956	-.3816846	.4032304
3	.1699329	.2450282	0.69	0.491	-.3221964	.6620622
4	.1324229	.208981	0.63	0.529	-.2873058	.5521515
work_st_2006	-.0995628	.0935502	-1.06	0.292	-.2874542	.0883287
smoking_2006						
2	.2975361	.0632594	4.70	0.000	.1704794	.4245928
3	.5473398	.1041221	5.26	0.000	.3379577	.7567219
physic_act_2006	-.2415419	.038012	-6.35	0.000	-.3178885	-.1651952
2.srh_2006	.3102781	.0750692	4.13	0.000	.1594997	.4610564
bmibr_2006						
2	-.2309187	.0732794	-3.15	0.003	-.378098	-.0837393
3	-.2350241	.0873191	-2.69	0.010	-.4104016	-.0596467
cardiometcondbr_2006	.3173959	.042749	7.42	0.000	.2315361	.4032558
cesd_2006	-.0137499	.0260519	-0.53	0.600	-.0660747	.0385749

```
27 .
28 .
29 .
30 . ************************SECOND POOR SLEEP QUALITY TERTILE*************************************
31 .
32 . ***MODEL 1****
33 . foreach x of varlist  lnhurd_odds lnexpert_odds lnlasso_odds {
     2. mi estimate: svy, subpop(sample_final): stcox `x' AGE2006 SEX NonWhite if poorsleep_2006tert==2
     3.
34 . }
```

Multiple-imputation estimates — Imputations = **5**
Survey: Cox regression — Number of obs = **3,159**

Number of strata = **52** — Population size = **10,415,347**
Number of PSUs = **104** — Subpop. no. obs = **3,055**
Subpop. size = **10,407,904**
Average RVI = **0.0000**
Largest FMI = **0.0000**
Complete DF = **52**
DF adjustment: **Small sample** — DF: min = **50.11**
avg = **50.11**
max = **50.11**
Model F test: **Equal FMI** — F(**4**, **50.1**) = **236.13**
Within VCE type: **Linearized** — Prob > F = **0.0000**

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lnhurd_odds	.0899617	.0184234	4.88	0.000	.0529592	.1269643
AGE2006	.0829478	.0053743	15.43	0.000	.0721537	.0937419
SEX	-.4108659	.0468257	-8.77	0.000	-.504913	-.3168188
NonWhite	-.0739335	.0675561	-1.09	0.279	-.2096167	.0617497

Multiple-imputation estimates — Imputations = **5**
Survey: Cox regression — Number of obs = **3,159**

Number of strata = **52** — Population size = **10,415,347**
Number of PSUs = **104** — Subpop. no. obs = **3,055**
Subpop. size = **10,407,904**
Average RVI = **0.0000**
Largest FMI = **0.0000**
Complete DF = **52**
DF adjustment: **Small sample** — DF: min = **50.11**
avg = **50.11**
max = **50.11**
Model F test: **Equal FMI** — F(**4**, **50.1**) = **263.13**
Within VCE type: **Linearized** — Prob > F = **0.0000**

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lnexpert_odds	.1526511	.0103798	14.71	0.000	.1318037	.1734985
AGE2006	.0698335	.0045632	15.30	0.000	.0606685	.0789985
SEX	-.3974111	.0445728	-8.92	0.000	-.4869333	-.3078888
NonWhite	-.1646756	.0686602	-2.40	0.020	-.3025762	-.026775

Multiple-imputation estimates — Imputations = **5**
Survey: Cox regression — Number of obs = **3,159**

```
Number of strata  =        52                 Population size   =  10,415,347
Number of PSUs    =       104                 Subpop. no. obs   =       3,055
                                              Subpop. size      =  10,407,904
                                              Average RVI       =      0.0000
                                              Largest FMI       =      0.0000
                                              Complete DF       =          52
DF adjustment:   Small sample                 DF:     min       =       50.11
                                                      avg       =       50.11
                                                      max       =       50.11
Model F test:       Equal FMI                 F(   4,   50.1)   =      251.87
Within VCE type:   Linearized                 Prob > F          =      0.0000
```

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lnlasso_odds	.1989318	.0147875	13.45	0.000	.1692317	.2286318
AGE2006	.0737063	.00437	16.87	0.000	.0649292	.0824833
SEX	-.4572903	.0445831	-10.26	0.000	-.5468333	-.3677473
NonWhite	-.1430182	.0651337	-2.20	0.033	-.273836	-.0122004

```
35 .
36 .
37 . foreach x of varlist  hurd_dem expert_dem lasso_dem {
     2. mi estimate: svy, subpop(sample_final): stcox `x' AGE2006 SEX NonWhite if poorsleep_2006tert==2
     3.
38 . }

Multiple-imputation estimates                 Imputations       =           5
Survey: Cox regression                        Number of obs     =       3,159

Number of strata  =        52                 Population size   =  10,415,347
Number of PSUs    =       104                 Subpop. no. obs   =       3,055
                                              Subpop. size      =  10,407,904
                                              Average RVI       =      0.0000
                                              Largest FMI       =      0.0000
                                              Complete DF       =          52
DF adjustment:   Small sample                 DF:     min       =       50.11
                                                      avg       =       50.11
                                                      max       =       50.11
Model F test:       Equal FMI                 F(   4,   50.1)   =      250.96
Within VCE type:   Linearized                 Prob > F          =      0.0000
```

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
hurd_dem	.6727398	.0679902	9.89	0.000	.5361848	.8092948
AGE2006	.0902832	.0037832	23.86	0.000	.0826848	.0978817
SEX	-.4325618	.0455442	-9.50	0.000	-.5240351	-.3410886
NonWhite	-.0305344	.0667109	-0.46	0.649	-.16452	.1034513

```
Multiple-imputation estimates                 Imputations       =           5
Survey: Cox regression                        Number of obs     =       3,159
```

Number of strata	= 52	Population size	= 10,415,347
Number of PSUs	= 104	Subpop. no. obs	= 3,055
		Subpop. size	= 10,407,904
		Average RVI	= 0.0000
		Largest FMI	= 0.0000
		Complete DF	= 52
DF adjustment:	Small sample	DF: min	= 50.11
		avg	= 50.11
		max	= 50.11
Model F test:	Equal FMI	F(4, 50.1)	= 211.99
Within VCE type:	Linearized	Prob > F	= 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
expert_dem	.7458979	.0809649	9.21	0.000	.5832839	.9085119
AGE2006	.0912858	.0038672	23.61	0.000	.0835187	.0990528
SEX	-.419618	.0464165	-9.04	0.000	-.5128433	-.3263926
NonWhite	-.0347113	.0719036	-0.48	0.631	-.1791261	.1097035

Multiple-imputation estimates		Imputations	= 5
Survey: Cox regression		Number of obs	= 3,159
Number of strata	= 52	Population size	= 10,415,347
Number of PSUs	= 104	Subpop. no. obs	= 3,055
		Subpop. size	= 10,407,904
		Average RVI	= 0.0000
		Largest FMI	= 0.0000
		Complete DF	= 52
DF adjustment:	Small sample	DF: min	= 50.11
		avg	= 50.11
		max	= 50.11
Model F test:	Equal FMI	F(4, 50.1)	= 209.12
Within VCE type:	Linearized	Prob > F	= 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lasso_dem	.7670301	.0830875	9.23	0.000	.6001528	.9339073
AGE2006	.0892318	.0038982	22.89	0.000	.0814024	.0970612
SEX	-.439131	.0462086	-9.50	0.000	-.5319386	-.3463234
NonWhite	-.0605149	.0705717	-0.86	0.395	-.2022546	.0812248

```
39 .
40 .
41 . ***MODEL 2****
42 . foreach x of varlist  lnhurd_odds lnexpert_odds lnlasso_odds {
  2. mi estimate: svy, subpop(sample_final): stcox `x' AGE2006 SEX NonWhite i.education  i.totwealth_2006 i.marit
> 06 cesd_2006 if poorsleep_2006tert==2
  3.
```

```
43 . }
```

Multiple-imputation estimates		Imputations	= 5
Survey: Cox regression		Number of obs	= 3,034
Number of strata	= 52	Population size	= 10,022,800
Number of PSUs	= 104	Subpop. no. obs	= 2,930
		Subpop. size	= 10,015,357
		Average RVI	= 15.4075
		Largest FMI	= 0.9961
		Complete DF	= 52
DF adjustment:	Small sample	DF: min	= 0.41
		avg	= 48.02
		max	= 50.11
Model F test:	Equal FMI	F(24, 51.8)	= 26.59
Within VCE type:	Linearized	Prob > F	= 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lnhurd_odds	.0972501	.0129356	7.52	0.000	.0712693	.1232308
AGE2006	.0779281	.0063563	12.26	0.000	.0651617	.0906944
SEX	-.4499406	.0578841	-7.77	0.000	-.5661996	-.3336817
NonWhite	-.3181373	.0772978	-4.12	0.000	-.4733864	-.1628881
education						
2	-.1156868	.0864668	-1.34	0.187	-.2893514	.0579777
3	-.0014139	.0759745	-0.02	0.985	-.1540053	.1511774
4	-.0391087	.0765853	-0.51	0.612	-.192927	.1147095
5	-.0629701	.0817409	-0.77	0.445	-.2271438	.1012035
totwealth_2006						
2	-.061381	.0562436	-1.09	0.280	-.1743438	.0515817
3	.035719	.1280593	0.28	0.781	-.2214823	.2929204
4	-.3948232	.3458748	-1.14	0.259	-1.089565	.2999184
5	-34.68446	6.720998	-5.16	0.336	-3595.817	3526.448
marital_2006						
2	-.3548879	.1419749	-2.50	0.016	-.6400376	-.0697383
3	-.2985789	.1651598	-1.81	0.077	-.6302946	.0331368
4	-.2613305	.1308777	-2.00	0.051	-.5241922	.0015313
work_st_2006	-.1129031	.0826705	-1.37	0.178	-.278943	.0531367
smoking_2006						
2	.282462	.0698742	4.04	0.000	.1421212	.4228027
3	.8814454	.1029983	8.56	0.000	.6745718	1.088319
physic_act_2006	-.1624219	.031618	-5.14	0.000	-.225927	-.0989169
2.srh_2006	.3296031	.0617822	5.33	0.000	.2055157	.4536905
bmibr_2006						
2	-.2424164	.0594919	-4.07	0.000	-.3619034	-.1229294
3	-.2196736	.0706456	-3.11	0.003	-.3615623	-.0777849
cardiometcondbr_2006	.3771242	.0426779	8.84	0.000	.2914077	.4628407
cesd_2006	.0159481	.0149479	1.07	0.291	-.0140742	.0459705

Multiple-imputation estimates		Imputations	= 5
Survey: Cox regression		Number of obs	= 3,034

Number of strata = **52** Population size = **10,022,800**
Number of PSUs = **104** Subpop. no. obs = **2,930**
Subpop. size = **10,015,357**
Average RVI = **.**
Largest FMI = **.**
Complete DF = **52**
DF adjustment: **Small sample** DF: min = **0.00**
avg = **.**
max = **.**
Model F test: **Equal FMI** F(**23**, **50.1**) = **67.38**
Within VCE type: **Linearized** Prob > F = **0.0000**

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lnexpert_odds	.0925597	.0115829	7.99	0.000	.0692958	.1158236
AGE2006	.0795563	.0061974	12.84	0.000	.0671091	.0920034
SEX	-.4420681	.05898	-7.50	0.000	-.5605284	-.3236078
NonWhite	-.29085	.0772473	-3.77	0.000	-.445998	-.135702
education						
2	-.0947374	.0914562	-1.04	0.305	-.2784228	.0889479
3	.0177105	.0749869	0.24	0.814	-.1328972	.1683183
4	-.0278797	.0757661	-0.37	0.714	-.1800526	.1242931
5	-.0665172	.0822965	-0.81	0.423	-.2318066	.0987722
totwealth_2006						
2	-.0621011	.0562648	-1.10	0.275	-.1751066	.0509044
3	.0408033	.1285106	0.32	0.752	-.2173043	.298911
4	-.3905303	.3635375	-1.07	0.288	-1.120743	.3396829
5	-38.60036	.	.	.	.	.
marital_2006						
2	-.312476	.1391023	-2.25	0.029	-.5918564	-.0330957
3	-.2745648	.1616488	-1.70	0.096	-.5992289	.0500993
4	-.2511267	.1287381	-1.95	0.057	-.5096912	.0074377
work_st_2006	-.1215867	.0841576	-1.44	0.155	-.2906132	.0474398
smoking_2006						
2	.2884103	.0718488	4.01	0.000	.1441045	.4327162
3	.884264	.1036208	8.53	0.000	.676141	1.092387
physic_act_2006	-.1523338	.0320647	-4.75	0.000	-.2167362	-.0879315
2.srh_2006	.3396236	.0623471	5.45	0.000	.2144015	.4648456
bmibr_2006						
2	-.2468241	.0597411	-4.13	0.000	-.3668116	-.1268365
3	-.22367	.0729749	-3.07	0.004	-.3702368	-.0771032
cardiometcondbr_2006	.363587	.0424476	8.57	0.000	.2783331	.448841
cesd_2006	.0130854	.0154344	0.85	0.401	-.0179141	.0440848

Multiple-imputation estimates Imputations = **5**
Survey: Cox regression Number of obs = **3,034**

Number of strata	= 52	Population size	= 10,022,800
Number of PSUs	= 104	Subpop. no. obs	= 2,930
		Subpop. size	= 10,015,357
		Average RVI	= 11.8402
		Largest FMI	= 0.9951
		Complete DF	= 52
DF adjustment:	**Small sample**	DF: min	= 0.49
		avg	= 48.02
		max	= 50.11
Model F test:	**Equal FMI**	F(24, 4.0)	= 35.77
Within VCE type:	**Linearized**	Prob > F	= 0.0017

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lnlasso_odds	.1440428	.0167489	8.60	0.000	.1104032	.1776823
AGE2006	.079176	.0060667	13.05	0.000	.0669913	.0913608
SEX	-.4866739	.0573309	-8.49	0.000	-.6018217	-.3715262
NonWhite	-.2858071	.076215	-3.75	0.000	-.4388817	-.1327324
education						
2	-.0748832	.0883054	-0.85	0.400	-.2522405	.1024741
3	.0505085	.0730326	0.69	0.492	-.0961741	.1971912
4	.0180453	.0756543	0.24	0.812	-.1339032	.1699937
5	-.0194703	.0808094	-0.24	0.811	-.1817731	.1428325
totwealth_2006						
2	-.0501139	.0561155	-0.89	0.376	-.1628197	.0625918
3	.0634541	.129208	0.49	0.625	-.1960543	.3229626
4	-.3594092	.345383	-1.04	0.303	-1.053181	.3343625
5	-36.05711	6.053526	-5.96	0.269	-1181.743	1109.628
marital_2006						
2	-.3565032	.1401526	-2.54	0.014	-.6379929	-.0750134
3	-.2806845	.1620163	-1.73	0.089	-.6060867	.0447177
4	-.2757471	.1291084	-2.14	0.038	-.5350553	-.016439
work_st_2006	-.1197915	.0833611	-1.44	0.157	-.2872184	.0476355
smoking_2006						
2	.2904153	.0707643	4.10	0.000	.1482873	.4325432
3	.883082	.1049056	8.42	0.000	.6723789	1.093785
physic_act_2006	-.1533144	.0322575	-4.75	0.000	-.2181039	-.0885249
2.srh_2006	.3460632	.0619912	5.58	0.000	.2215561	.4705704
bmibr_2006						
2	-.2199413	.0590062	-3.73	0.000	-.3384528	-.1014299
3	-.1769635	.0711075	-2.49	0.016	-.3197799	-.0341471
cardiometcondbr_2006	.3755715	.0428253	8.77	0.000	.2895588	.4615842
cesd_2006	.013604	.0147763	0.92	0.362	-.0160737	.0432817

```
44 .
45 .
46 . foreach x of varlist  hurd_dem expert_dem lasso_dem {
  2. mi estimate: svy, subpop(sample_final): stcox `x' AGE2006 SEX NonWhite i.education  i.totwealth_2006 i.marit
> 06 cesd_2006 if poorsleep_2006tert==2
  3.
47 . }
```

Multiple-imputation estimates — Imputations = 5
Survey: Cox regression — Number of obs = 3,034

Number of strata = 52 — Population size = 10,022,800
Number of PSUs = 104 — Subpop. no. obs = 2,930
Subpop. size = 10,015,357
Average RVI = 4.0773
Largest FMI = 0.9815
Complete DF = 52
DF adjustment: **Small sample** — DF: min = 1.22
avg = 48.05
max = 50.11
Model F test: **Equal FMI** — F(24, 18.5) = 89.00
Within VCE type: **Linearized** — Prob > F = 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
hurd_dem	.3974131	.0701182	5.67	0.000	.2565841	.5382421
AGE2006	.0895887	.0054438	16.46	0.000	.078655	.1005225
SEX	-.4936082	.0602291	-8.20	0.000	-.6145776	-.3726388
NonWhite	-.2530556	.0736881	-3.43	0.001	-.4010552	-.105056
education						
2	-.1199055	.095027	-1.26	0.213	-.3107627	.0709517
3	-.00862	.0773379	-0.11	0.912	-.1639499	.14671
4	-.0508921	.0783764	-0.65	0.519	-.2083075	.1065234
5	-.1264053	.0835044	-1.51	0.136	-.2941204	.0413098
totwealth_2006						
2	-.0730447	.0573194	-1.27	0.208	-.1881683	.0420789
3	.0077022	.1256749	0.06	0.951	-.2447099	.2601143
4	-.4806182	.3843998	-1.25	0.217	-1.252722	.2914857
5	-33.33561	3.471072	-9.60	0.043	-62.61896	-4.052263
marital_2006						
2	-.3191373	.134935	-2.37	0.022	-.5901477	-.0481268
3	-.2575475	.1564643	-1.65	0.106	-.571799	.056704
4	-.2329069	.1254677	-1.86	0.069	-.4849031	.0190894
work_st_2006	-.166395	.0797007	-2.09	0.042	-.3264701	-.0063198
smoking_2006						
2	.2672504	.070159	3.81	0.000	.1263382	.4081625
3	.8751251	.1002006	8.73	0.000	.6738746	1.076376
physic_act_2006	-.1727653	.0332004	-5.20	0.000	-.2394485	-.1060821
2.srh_2006	.3500605	.0665085	5.26	0.000	.2164807	.4836404
bmibr_2006						
2	-.2371715	.0605081	-3.92	0.000	-.3586999	-.1156431
3	-.2169098	.071406	-3.04	0.004	-.3603255	-.0734941
cardiometcondbr_2006	.3931115	.0438111	8.97	0.000	.3051191	.481104
cesd_2006	.0219233	.0149527	1.47	0.149	-.0081086	.0519553

Multiple-imputation estimates — Imputations = 5
Survey: Cox regression — Number of obs = 3,034

Number of strata = 52 — Population size = 10,022,800
Number of PSUs = 104 — Subpop. no. obs = 2,930
Subpop. size = 10,015,357
Average RVI = 18.4376
Largest FMI = 0.9966
Complete DF = 52
DF adjustment: **Small sample** — DF: min = 0.37
avg = 48.02
max = 50.11
Model F test: **Equal FMI** — F(24, 50.9) = 30.05
Within VCE type: **Linearized** — Prob > F = 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
expert_dem	.408752	.0967948	4.22	0.000	.214344	.60316
AGE2006	.0917672	.0053366	17.20	0.000	.0810487	.1024857
SEX	-.4754118	.0596003	-7.98	0.000	-.5951183	-.3557053
NonWhite	-.2493986	.0746721	-3.34	0.002	-.3993745	-.0994227
education						
2	-.1636645	.0985771	-1.66	0.103	-.3616518	.0343228
3	-.01392	.0742031	-0.19	0.852	-.1629537	.1351137
4	-.0615289	.0768968	-0.80	0.427	-.2159727	.0929149
5	-.1260598	.0826117	-1.53	0.133	-.2919821	.0398625
totwealth_2006						
2	-.0904499	.0542891	-1.67	0.102	-.1994874	.0185876
3	-.0032232	.1222508	-0.03	0.979	-.2487582	.2423119
4	-.4903325	.3964746	-1.24	0.222	-1.286689	.3060241
5	-37.31531	7.102687	-5.25	0.366	-8428.911	8354.28
marital_2006						
2	-.3042134	.1367505	-2.22	0.031	-.5788703	-.0295566
3	-.2632791	.1556308	-1.69	0.097	-.5758564	.0492982
4	-.2400756	.1285614	-1.87	0.068	-.4982853	.018134
work_st_2006	-.1547898	.0796919	-1.94	0.058	-.3148472	.0052677
smoking_2006						
2	.2912151	.0721227	4.04	0.000	.1463589	.4360714
3	.8873126	.1002659	8.85	0.000	.6859302	1.088695
physic_act_2006	-.1621894	.0326349	-4.97	0.000	-.227737	-.0966417
2.srh_2006	.3534461	.0655726	5.39	0.000	.221746	.4851462
bmibr_2006						
2	-.2438786	.0595378	-4.10	0.000	-.3634581	-.1242992
3	-.221387	.0711035	-3.11	0.003	-.3641952	-.0785787
cardiometcondbr_2006	.3782874	.0441095	8.58	0.000	.2896956	.4668792
cesd_2006	.0194404	.015397	1.26	0.213	-.011484	.0503647

Multiple-imputation estimates — Imputations = 5
Survey: Cox regression — Number of obs = 3,034

Number of strata	= 52	Population size	= 10,022,800
Number of PSUs	= 104	Subpop. no. obs	= 2,930
		Subpop. size	= 10,015,357
		Average RVI	= 15.5705
		Largest FMI	= 0.9961
		Complete DF	= 52
DF adjustment:	**Small sample**	DF: min	= 0.41
		avg	= 48.02
		max	= 50.11
Model F test:	**Equal FMI**	F(24, 51.7)	= 29.61
Within VCE type:	**Linearized**	Prob > F	= 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lasso_dem	.4833265	.0812656	5.95	0.000	.3201083	.6465447
AGE2006	.0897453	.0054722	16.40	0.000	.0787545	.1007362
SEX	-.4946146	.0603374	-8.20	0.000	-.6158015	-.3734278
NonWhite	-.267149	.0768761	-3.48	0.001	-.4215515	-.1127465
education						
2	-.1474811	.0976778	-1.51	0.137	-.3436623	.0487001
3	.0030913	.0716448	0.04	0.966	-.1408042	.1469869
4	-.0298153	.0730738	-0.41	0.685	-.1765807	.1169501
5	-.1097623	.0824258	-1.33	0.189	-.2753111	.0557864
totwealth_2006						
2	-.073161	.0571805	-1.28	0.207	-.1880055	.0416835
3	.0086012	.1265265	0.07	0.946	-.2455215	.2627238
4	-.4666789	.391604	-1.19	0.239	-1.253253	.3198949
5	-35.13982	6.720906	-5.23	0.334	-3605.247	3534.968
marital_2006						
2	-.303766	.1397959	-2.17	0.035	-.5845392	-.0229927
3	-.2225034	.1569723	-1.42	0.163	-.5377751	.0927684
4	-.2294359	.1273659	-1.80	0.078	-.4852445	.0263726
work_st_2006	-.1604215	.0788183	-2.04	0.047	-.3187244	-.0021187
smoking_2006						
2	.2678869	.0709492	3.78	0.000	.1253876	.4103863
3	.8642821	.1042946	8.29	0.000	.6548084	1.073756
physic_act_2006	-.1607252	.0336795	-4.77	0.000	-.2283706	-.0930799
2.srh_2006	.369624	.0647239	5.71	0.000	.2396284	.4996195
bmibr_2006						
2	-.2294163	.058248	-3.94	0.000	-.3464053	-.1124274
3	-.2005376	.0707019	-2.84	0.007	-.3425392	-.058536
cardiometcondbr_2006	.3842108	.0440712	8.72	0.000	.295696	.4727257
cesd_2006	.0210735	.0148821	1.42	0.163	-.0088166	.0509637

```
48 .
49 .
50 . ************************THIRD POOR SLEEP QUALITY TERTILE*************************************
51 .
52 . ***MODEL 1****
53 . foreach x of varlist  lnhurd_odds lnexpert_odds lnlasso_odds {
  2. mi estimate: svy, subpop(sample_final): stcox `x' AGE2006 SEX NonWhite if poorsleep_2006tert==3
  3.
54 . }
```

```
Multiple-imputation estimates                   Imputations       =          5
Survey: Cox regression                          Number of obs     =      1,433

Number of strata  =        52                   Population size   =  4,783,913
Number of PSUs    =       104                   Subpop. no. obs   =      1,377
                                                Subpop. size      =  4,781,623
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =         52
DF adjustment:   Small sample                   DF:     min       =      50.11
                                                        avg       =      50.11
                                                        max       =      50.11
Model F test:       Equal FMI                   F(   4,   50.1)   =      52.07
Within VCE type:   Linearized                   Prob > F          =     0.0000
```

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lnhurd_odds	.0801048	.0154617	5.18	0.000	.0490508	.1111588
AGE2006	.0743671	.0073509	10.12	0.000	.0596032	.0891311
SEX	-.3130892	.0667712	-4.69	0.000	-.4471959	-.1789826
NonWhite	-.2261325	.08477	-2.67	0.010	-.3963889	-.0558761

```
Multiple-imputation estimates                   Imputations       =          5
Survey: Cox regression                          Number of obs     =      1,433

Number of strata  =        52                   Population size   =  4,783,913
Number of PSUs    =       104                   Subpop. no. obs   =      1,377
                                                Subpop. size      =  4,781,623
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =         52
DF adjustment:   Small sample                   DF:     min       =      50.11
                                                        avg       =      50.11
                                                        max       =      50.11
Model F test:       Equal FMI                   F(   4,   50.1)   =      62.74
Within VCE type:   Linearized                   Prob > F          =     0.0000
```

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lnexpert_odds	.1318023	.0161836	8.14	0.000	.0992983	.1643063
AGE2006	.0636001	.0072376	8.79	0.000	.0490637	.0781366
SEX	-.3203925	.0675867	-4.74	0.000	-.456137	-.1846479
NonWhite	-.2915548	.0863616	-3.38	0.001	-.4650078	-.1181017

```
Multiple-imputation estimates                   Imputations       =          5
Survey: Cox regression                          Number of obs     =      1,433
```

```
Number of strata  =        52                  Population size   =  4,783,913
Number of PSUs    =       104                  Subpop. no. obs   =      1,377
                                               Subpop. size      =  4,781,623
                                               Average RVI       =     0.0000
                                               Largest FMI       =     0.0000
                                               Complete DF       =         52
DF adjustment:   Small sample                  DF:     min       =      50.11
                                                       avg       =      50.11
                                                       max       =      50.11
Model F test:       Equal FMI                  F(   4,   50.1)   =      63.55
Within VCE type:   Linearized                  Prob > F          =     0.0000
```

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lnlasso_odds	.1644185	.0188447	8.72	0.000	.1265698	.2022671
AGE2006	.0686222	.0069163	9.92	0.000	.0547312	.0825132
SEX	-.3492315	.0683332	-5.11	0.000	-.4864754	-.2119876
NonWhite	-.2382873	.0809669	-2.94	0.005	-.4009054	-.0756693

```
55 .
56 .
57 . foreach x of varlist  hurd_dem expert_dem lasso_dem {
     2. mi estimate: svy, subpop(sample_final): stcox `x' AGE2006 SEX NonWhite if poorsleep_2006tert==3
     3.
58 . }

Multiple-imputation estimates                  Imputations       =          5
Survey: Cox regression                         Number of obs     =      1,433

Number of strata  =        52                  Population size   =  4,783,913
Number of PSUs    =       104                  Subpop. no. obs   =      1,377
                                               Subpop. size      =  4,781,623
                                               Average RVI       =     0.0000
                                               Largest FMI       =     0.0000
                                               Complete DF       =         52
DF adjustment:   Small sample                  DF:     min       =      50.11
                                                       avg       =      50.11
                                                       max       =      50.11
Model F test:       Equal FMI                  F(   4,   50.1)   =      43.71
Within VCE type:   Linearized                  Prob > F          =     0.0000
```

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
hurd_dem	.5051361	.1177616	4.29	0.000	.2686177	.7416545
AGE2006	.0815229	.0070278	11.60	0.000	.067408	.0956379
SEX	-.3394554	.0679438	-5.00	0.000	-.4759172	-.2029936
NonWhite	-.1217109	.0865142	-1.41	0.166	-.2954705	.0520486

```
Multiple-imputation estimates                  Imputations       =          5
Survey: Cox regression                         Number of obs     =      1,433
```

```
Number of strata  =        52                  Population size   =  4,783,913
Number of PSUs    =       104                  Subpop. no. obs   =      1,377
                                               Subpop. size      =  4,781,623
                                               Average RVI       =     0.0000
                                               Largest FMI       =     0.0000
                                               Complete DF       =         52
DF adjustment:   Small sample                  DF:     min       =      50.11
                                                       avg       =      50.11
                                                       max       =      50.11
Model F test:       Equal FMI                  F(   4,   50.1)   =      50.05
Within VCE type:   Linearized                  Prob > F          =     0.0000
```

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
expert_dem	.5565017	.1067821	5.21	0.000	.3420352	.7709682
AGE2006	.0805863	.0061212	13.17	0.000	.0682921	.0928805
SEX	-.3639141	.0653317	-5.57	0.000	-.4951295	-.2326986
NonWhite	-.152343	.081712	-1.86	0.068	-.3164576	.0117715

```
Multiple-imputation estimates                  Imputations       =          5
Survey: Cox regression                         Number of obs     =      1,433

Number of strata  =        52                  Population size   =  4,783,913
Number of PSUs    =       104                  Subpop. no. obs   =      1,377
                                               Subpop. size      =  4,781,623
                                               Average RVI       =     0.0000
                                               Largest FMI       =     0.0000
                                               Complete DF       =         52
DF adjustment:   Small sample                  DF:     min       =      50.11
                                                       avg       =      50.11
                                                       max       =      50.11
Model F test:       Equal FMI                  F(   4,   50.1)   =      50.19
Within VCE type:   Linearized                  Prob > F          =     0.0000
```

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lasso_dem	.4789322	.1032501	4.64	0.000	.2715596	.6863049
AGE2006	.082058	.0065319	12.56	0.000	.068939	.095177
SEX	-.3719131	.0689698	-5.39	0.000	-.5104354	-.2333907
NonWhite	-.1294188	.0826517	-1.57	0.124	-.2954206	.036583

```
59 .
60 . ***MODEL 2****
61 . foreach x of varlist  lnhurd_odds lnexpert_odds lnlasso_odds {
     2. mi estimate: svy, subpop(sample_final): stcox `x' AGE2006 SEX NonWhite i.education  i.totwealth_2006 i.marit
   > 06 cesd_2006 if poorsleep_2006tert==3
     3.
```

```
62 . }
```

Multiple-imputation estimates — Imputations = 5
Survey: Cox regression — Number of obs = 1,348

Number of strata = 52 — Population size = 4,504,619
Number of PSUs = 104 — Subpop. no. obs = 1,292
Subpop. size = 4,502,329
Average RVI = 0.0002
Largest FMI = 0.0019
Complete DF = 52
DF adjustment: Small sample — DF: min = 50.08
avg = 50.11
max = 50.11
Model F test: Equal FMI — F(23, 50.1) = 26.07
Within VCE type: Linearized — Prob > F = 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lnhurd_odds	.0657638	.0185374	3.55	0.001	.0285324	.1029952
AGE2006	.0719186	.0105895	6.79	0.000	.0506501	.0931871
SEX	-.3248569	.0791646	-4.10	0.000	-.4838556	-.1658583
NonWhite	-.3794424	.1065027	-3.56	0.001	-.5933484	-.1655364
education						
2	.081903	.1724643	0.47	0.637	-.2644833	.4282892
3	-.0000256	.0813852	-0.00	1.000	-.1634842	.1634331
4	.0057004	.0954494	0.06	0.953	-.1860052	.1974059
5	-.0767313	.0979924	-0.78	0.437	-.2735444	.1200818
totwealth_2006						
2	-.0562979	.1085188	-0.52	0.606	-.2742527	.1616569
3	-.0380193	.2044272	-0.19	0.853	-.4486013	.3725627
4	-.0641557	.6590137	-0.10	0.923	-1.387752	1.259441
marital_2006						
2	-.041257	.2442805	-0.17	0.867	-.5318825	.4493684
3	.0725021	.246237	0.29	0.770	-.4220528	.567057
4	-.0021207	.2207115	-0.01	0.992	-.445409	.4411676
work_st_2006	-.059311	.1284284	-0.46	0.646	-.3172531	.1986311
smoking_2006						
2	.3026049	.0643926	4.70	0.000	.1732749	.4319348
3	.5460737	.1751112	3.12	0.003	.1943671	.8977804
physic_act_2006	-.0992601	.0594602	-1.67	0.101	-.2186831	.0201629
2.srh_2006	.4254549	.0756391	5.62	0.000	.2735368	.577373
bmibr_2006						
2	-.217502	.1039797	-2.09	0.042	-.4263403	-.0086637
3	.0702048	.1004296	0.70	0.488	-.1315034	.2719129
cardiometcondbr_2006	.2114327	.0856421	2.47	0.017	.0394246	.3834409
cesd_2006	-.0018414	.0215903	-0.09	0.932	-.0452046	.0415218

Multiple-imputation estimates — Imputations = 5
Survey: Cox regression — Number of obs = 1,348

Number of strata	= 52	Population size	= 4,504,619
Number of PSUs	= 104	Subpop. no. obs	= 1,292
		Subpop. size	= 4,502,329
		Average RVI	= 0.0002
		Largest FMI	= 0.0017
		Complete DF	= 52
DF adjustment:	Small sample	DF: min	= 50.09
		avg	= 50.11
		max	= 50.11
Model F test:	Equal FMI	F(23, 50.1)	= 27.37
Within VCE type:	Linearized	Prob > F	= 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lnexpert_odds	.080872	.0187162	4.32	0.000	.0432815	.1184626
AGE2006	.0690163	.0102218	6.75	0.000	.0484864	.0895463
SEX	-.3233192	.0811259	-3.99	0.000	-.4862569	-.1603814
NonWhite	-.3815825	.1045682	-3.65	0.001	-.5916031	-.171562
education						
2	.104018	.1733186	0.60	0.551	-.2440838	.4521199
3	.030793	.0796384	0.39	0.701	-.1291574	.1907435
4	.0384633	.0965051	0.40	0.692	-.1553625	.2322891
5	-.0642554	.1002742	-0.64	0.525	-.2656513	.1371405
totwealth_2006						
2	-.0512535	.1082716	-0.47	0.638	-.2687117	.1662048
3	.0073627	.2075968	0.04	0.972	-.4095854	.4243107
4	-.024444	.6437518	-0.04	0.970	-1.317388	1.2685
marital_2006						
2	.0017696	.2429402	0.01	0.994	-.4861638	.489703
3	.0982383	.2451806	0.40	0.690	-.3941948	.5906715
4	.0318913	.2189316	0.15	0.885	-.407822	.4716046
work_st_2006	-.0592723	.1260771	-0.47	0.640	-.3124921	.1939474
smoking_2006						
2	.312317	.0662102	4.72	0.000	.1793366	.4452975
3	.5255139	.1773773	2.96	0.005	.1692569	.881771
physic_act_2006	-.0856292	.0585018	-1.46	0.150	-.2031272	.0318688
2.srh_2006	.4209886	.0737065	5.71	0.000	.2729519	.5690253
bmibr_2006						
2	-.2283307	.1030012	-2.22	0.031	-.4352036	-.0214578
3	.0610987	.0981903	0.62	0.537	-.1361118	.2583092
cardiometcondbr_2006	.1953436	.0860182	2.27	0.027	.0225801	.3681071
cesd_2006	-.0043961	.0217444	-0.20	0.841	-.0480687	.0392764

Multiple-imputation estimates		Imputations	= 5
Survey: Cox regression		Number of obs	= 1,348

Number of strata	= 52	Population size	= 4,504,619
Number of PSUs	= 104	Subpop. no. obs	= 1,292
		Subpop. size	= 4,502,329
		Average RVI	= 0.0002
		Largest FMI	= 0.0019
		Complete DF	= 52
DF adjustment:	Small sample	DF: min	= 50.08
		avg	= 50.11
		max	= 50.11
Model F test:	Equal FMI	F(23, 50.1)	= 26.94
Within VCE type:	Linearized	Prob > F	= 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lnlasso_odds	.121921	.0281798	4.33	0.000	.0653232	.1785189
AGE2006	.0696444	.0098848	7.05	0.000	.0497913	.0894975
SEX	-.3606683	.0818369	-4.41	0.000	-.5250341	-.1963025
NonWhite	-.3639648	.101575	-3.58	0.001	-.5679737	-.1599559
education						
2	.1296969	.1725635	0.75	0.456	-.2168885	.4762823
3	.0499389	.081019	0.62	0.540	-.1127842	.2126619
4	.0662175	.1015687	0.65	0.517	-.1377783	.2702133
5	-.0227094	.1015135	-0.22	0.824	-.2265944	.1811755
totwealth_2006						
2	-.0508249	.1087303	-0.47	0.642	-.2692044	.1675546
3	-.0227092	.2011944	-0.11	0.911	-.4267983	.3813799
4	-.0529471	.6453609	-0.08	0.935	-1.349123	1.243228
marital_2006						
2	-.041845	.2475204	-0.17	0.866	-.5389776	.4552875
3	.0746439	.2464022	0.30	0.763	-.4202429	.5695307
4	-.005431	.2198186	-0.02	0.980	-.4469258	.4360638
work_st_2006	-.0526095	.1272748	-0.41	0.681	-.3082346	.2030157
smoking_2006						
2	.3119331	.0653359	4.77	0.000	.1807085	.4431577
3	.5156468	.1792595	2.88	0.006	.1556085	.8756851
physic_act_2006	-.0862257	.0588131	-1.47	0.149	-.2043491	.0318976
2.srh_2006	.4252181	.0728697	5.84	0.000	.2788621	.5715742
bmibr_2006						
2	-.2100854	.1029242	-2.04	0.047	-.4168038	-.003367
3	.1244163	.1041818	1.19	0.238	-.0848277	.3336604
cardiometcondbr_2006	.204551	.085295	2.40	0.020	.0332399	.375862
cesd_2006	-.0045081	.0222548	-0.20	0.840	-.0492057	.0401896

```
63 .
64 .
65 . foreach x of varlist  hurd_dem expert_dem lasso_dem {
  2. mi estimate: svy, subpop(sample_final): stcox `x' AGE2006 SEX NonWhite i.education  i.totwealth_2006 i.marit
> 06 cesd_2006 if poorsleep_2006tert==3
  3.
66 . }
```

Multiple-imputation estimates		Imputations	= 5
Survey: Cox regression		Number of obs	= 1,348
Number of strata	= 52	Population size	= 4,504,619
Number of PSUs	= 104	Subpop. no. obs	= 1,292
		Subpop. size	= 4,502,329
		Average RVI	= 0.0002
		Largest FMI	= 0.0020
		Complete DF	= 52
DF adjustment:	Small sample	DF: min	= 50.08
		avg	= 50.11
		max	= 50.11
Model F test:	Equal FMI	F(23, 50.1)	= 23.80
Within VCE type:	Linearized	Prob > F	= 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
hurd_dem	.1950351	.1359108	1.44	0.157	-.077935	.4680051
AGE2006	.0810094	.0101287	8.00	0.000	.0606665	.1013523
SEX	-.3550613	.0771519	-4.60	0.000	-.5100175	-.2001051
NonWhite	-.3189047	.1056157	-3.02	0.004	-.5310293	-.1067801
education						
2	.1190929	.1751476	0.68	0.500	-.2326826	.4708684
3	-.0073465	.080182	-0.09	0.927	-.1683886	.1536956
4	-.0055992	.0957707	-0.06	0.954	-.1979501	.1867517
5	-.1345177	.0997648	-1.35	0.184	-.3348906	.0658551
totwealth_2006						
2	-.0833051	.1050248	-0.79	0.431	-.2942423	.127632
3	-.040625	.2118834	-0.19	0.849	-.4661824	.3849324
4	-.0894536	.6422973	-0.14	0.890	-1.379476	1.200569
marital_2006						
2	-.0290335	.2445176	-0.12	0.906	-.5201351	.4620682
3	.0737707	.2463798	0.30	0.766	-.421071	.5686124
4	.0138757	.2193818	0.06	0.950	-.4267418	.4544932
work_st_2006	-.0543442	.1335709	-0.41	0.686	-.3226148	.2139264
smoking_2006						
2	.3000539	.0638197	4.70	0.000	.1718746	.4282331
3	.5419168	.1684977	3.22	0.002	.2034925	.8803411
physic_act_2006	-.106732	.0575916	-1.85	0.070	-.222402	.008938
2.srh_2006	.447203	.0747899	5.98	0.000	.2969904	.5974156
bmibr_2006						
2	-.2255728	.1044507	-2.16	0.036	-.4353569	-.0157887
3	.0496719	.099665	0.50	0.620	-.1505005	.2498443
cardiometcondbr_2006	.2168531	.0872922	2.48	0.016	.0415306	.3921755
cesd_2006	.0000878	.0208045	0.00	0.997	-.0416971	.0418727

Multiple-imputation estimates — Imputations = 5
Survey: Cox regression — Number of obs = 1,348

Number of strata = 52 — Population size = 4,504,619
Number of PSUs = 104 — Subpop. no. obs = 1,292
Subpop. size = 4,502,329
Average RVI = 0.0002
Largest FMI = 0.0020
Complete DF = 52
DF adjustment: **Small sample** — DF: min = 50.08
avg = 50.11
max = 50.11
Model F test: **Equal FMI** — F(23, 50.1) = 21.81
Within VCE type: **Linearized** — Prob > F = 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
expert_dem	.2909787	.1226438	2.37	0.022	.0446547	.5373026
AGE2006	.0798587	.0090979	8.78	0.000	.0615861	.0981314
SEX	-.3655617	.0779361	-4.69	0.000	-.522093	-.2090305
NonWhite	-.3241751	.1052512	-3.08	0.003	-.5355675	-.1127826
education						
2	.1281885	.1745675	0.73	0.466	-.2224218	.4787988
3	.0197144	.0808663	0.24	0.808	-.1427023	.1821311
4	.0249789	.0987043	0.25	0.801	-.173264	.2232218
5	-.1062601	.1004171	-1.06	0.295	-.3079432	.0954229
totwealth_2006						
2	-.084547	.104496	-0.81	0.422	-.2944223	.1253282
3	-.0340726	.2093333	-0.16	0.871	-.4545083	.3863632
4	-.1099418	.6409872	-0.17	0.865	-1.397333	1.17745
marital_2006						
2	-.0174513	.244291	-0.07	0.943	-.5080979	.4731953
3	.0849175	.2478143	0.34	0.733	-.4128054	.5826403
4	.0189101	.2210227	0.09	0.932	-.425003	.4628233
work_st_2006	-.0584406	.1310452	-0.45	0.658	-.3216385	.2047572
smoking_2006						
2	.2960407	.0666887	4.44	0.000	.1620991	.4299823
3	.5437078	.1653498	3.29	0.002	.2116056	.8758101
physic_act_2006	-.1025409	.0570155	-1.80	0.078	-.2170539	.011972
2.srh_2006	.4435598	.0722542	6.14	0.000	.2984401	.5886796
bmibr_2006						
2	-.2271932	.1031957	-2.20	0.032	-.4344568	-.0199295
3	.0585942	.0972661	0.60	0.550	-.1367602	.2539486
cardiometcondbr_2006	.2165753	.0863722	2.51	0.015	.0431007	.3900499
cesd_2006	-.000915	.020502	-0.04	0.965	-.0420923	.0402623

Multiple-imputation estimates — Imputations = 5
Survey: Cox regression — Number of obs = 1,348

Number of strata	= 52	Population size	= 4,504,619
Number of PSUs	= 104	Subpop. no. obs	= 1,292
		Subpop. size	= 4,502,329
		Average RVI	= 0.0002
		Largest FMI	= 0.0019
		Complete DF	= 52
DF adjustment:	Small sample	DF: min	= 50.08
		avg	= 50.11
		max	= 50.11
Model F test:	Equal FMI	F(23, 50.1)	= 22.21
Within VCE type:	Linearized	Prob > F	= 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lasso_dem	.1363404	.1303386	1.05	0.301	-.1254384	.3981192
AGE2006	.0822338	.0091362	9.00	0.000	.0638842	.1005834
SEX	-.3678275	.076946	-4.78	0.000	-.5223701	-.2132849
NonWhite	-.3180446	.1042018	-3.05	0.004	-.5273294	-.1087598
education						
2	.1172472	.1739306	0.67	0.503	-.2320839	.4665783
3	-.0196529	.0830069	-0.24	0.814	-.1863686	.1470629
4	-.0087032	.0960462	-0.09	0.928	-.2016075	.184201
5	-.139871	.1031501	-1.36	0.181	-.347043	.0673011
totwealth_2006						
2	-.0822817	.1039308	-0.79	0.432	-.2910216	.1264582
3	-.0362145	.2095847	-0.17	0.864	-.4571552	.3847261
4	-.0974469	.6413346	-0.15	0.880	-1.385536	1.190642
marital_2006						
2	-.0350319	.2395567	-0.15	0.884	-.5161699	.4461061
3	.0649177	.2398818	0.27	0.788	-.4168733	.5467086
4	.0005878	.2163933	0.00	0.998	-.4340275	.435203
work_st_2006	-.0536949	.1307616	-0.41	0.683	-.3163232	.2089333
smoking_2006						
2	.2989003	.0642317	4.65	0.000	.1698937	.427907
3	.5166626	.1728003	2.99	0.004	.1695967	.8637284
physic_act_2006	-.1086898	.0569895	-1.91	0.062	-.2231505	.0057708
2.srh_2006	.4472634	.0726586	6.16	0.000	.3013314	.5931954
bmibr_2006						
2	-.2228273	.1049331	-2.12	0.039	-.4335803	-.0120743
3	.0543492	.1020638	0.53	0.597	-.1506411	.2593395
cardiometcondbr_2006	.2133458	.0852736	2.50	0.016	.0420777	.384614
cesd_2006	.0036895	.0215373	0.17	0.865	-.0395672	.0469462

```
67 .
68 . ************************************INTERACTION WITH POOR SLEEP QUALITY TERTILE*****************************
69 .
70 .
71 . ***MODEL 1****
72 . foreach x of varlist  lnhurd_odds lnexpert_odds lnlasso_odds {
     2. mi estimate: svy, subpop(sample_final): stcox c.`x'##c.poorsleep_2006tert AGE2006 SEX NonWhite
     3.
73 . }
```

Multiple-imputation estimates		Imputations	= 5
Survey: Cox regression		Number of obs	= 6,951
Number of strata	= 52	Population size	= 22,747,247
Number of PSUs	= 104	Subpop. no. obs	= 6,718
		Subpop. size	= 22,734,819
		Average RVI	= 0.0000
		Largest FMI	= 0.0000
		Complete DF	= 52
DF adjustment:	Small sample	DF: min	= 50.11
		avg	= 50.11
		max	= 50.11
Model F test:	Equal FMI	F(6, 50.1)	= 318.06
Within VCE type:	Linearized	Prob > F	= 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lnhurd_odds	.0990522	.0175773	5.64	0.000	.063749	.1343553
poorsleep_2006tert	.0412987	.0390491	1.06	0.295	-.0371295	.1197269
c.lnhurd_odds#c.poorsleep_2006tert	-.0079917	.0087818	-0.91	0.367	-.0256296	.0096461
AGE2006	.0845034	.0035422	23.86	0.000	.0773891	.0916178
SEX	-.3552068	.031957	-11.12	0.000	-.4193908	-.2910228
NonWhite	-.0369917	.0497927	-0.74	0.461	-.136998	.0630145

Multiple-imputation estimates		Imputations	= 5
Survey: Cox regression		Number of obs	= 6,951
Number of strata	= 52	Population size	= 22,747,247
Number of PSUs	= 104	Subpop. no. obs	= 6,718
		Subpop. size	= 22,734,819
		Average RVI	= 0.0000
		Largest FMI	= 0.0000
		Complete DF	= 52
DF adjustment:	Small sample	DF: min	= 50.11
		avg	= 50.11
		max	= 50.11
Model F test:	Equal FMI	F(6, 50.1)	= 325.93
Within VCE type:	Linearized	Prob > F	= 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lnexpert_odds	.1933404	.0215694	8.96	0.000	.1500194	.2366614
poorsleep_2006tert	-.0221606	.0402887	-0.55	0.585	-.1030785	.0587574
c.lnexpert_odds#c.poorsleep_2006tert	-.0234029	.0095552	-2.45	0.018	-.042594	-.0042118
AGE2006	.0707409	.00352	20.10	0.000	.0636712	.0778107
SEX	-.3457883	.0316913	-10.91	0.000	-.4094387	-.2821379
NonWhite	-.1099662	.047399	-2.32	0.024	-.2051648	-.0147676

Multiple-imputation estimates — Imputations = 5
Survey: Cox regression — Number of obs = 6,951

Number of strata = 52 — Population size = 22,747,247
Number of PSUs = 104 — Subpop. no. obs = 6,718
Subpop. size = 22,734,819
Average RVI = 0.0000
Largest FMI = 0.0000
Complete DF = 52
DF adjustment: Small sample — DF: min = 50.11
avg = 50.11
max = 50.11
Model F test: Equal FMI — F(6, 50.1) = 346.40
Within VCE type: Linearized — Prob > F = 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lnlasso_odds	.250411	.0255986	9.78	0.000	.1989975	.3018246
poorsleep_2006tert	-.017363	.0366211	-0.47	0.637	-.0909146	.0561886
c.lnlasso_odds#c.poorsleep_2006tert	-.030868	.0112997	-2.73	0.009	-.0535629	-.0081731
AGE2006	.0752688	.0032508	23.15	0.000	.0687398	.0817978
SEX	-.3936225	.0324897	-12.12	0.000	-.4588764	-.3283685
NonWhite	-.0880847	.0463276	-1.90	0.063	-.1811314	.004962

```
74 .
75 .
76 . ***MODEL 1****
77 . foreach x of varlist  hurd_dem expert_dem lasso_dem {
     2. mi estimate: svy, subpop(sample_final): stcox c.`x'##c.poorsleep_2006tert AGE2006 SEX NonWhite
     3.
78 . }
```

Multiple-imputation estimates — Imputations = 5
Survey: Cox regression — Number of obs = 6,951

Number of strata = **52** Population size = **22,747,247**
Number of PSUs = **104** Subpop. no. obs = **6,718**
Subpop. size = **22,734,819**
Average RVI = **0.0000**
Largest FMI = **0.0000**
Complete DF = **52**
DF adjustment: **Small sample** DF: min = **50.11**
avg = **50.11**
max = **50.11**
Model F test: **Equal FMI** F(**6**, **50.1**) = **339.18**
Within VCE type: **Linearized** Prob > F = **0.0000**

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
hurd_dem	**1.085467**	**.1350899**	**8.04**	**0.000**	**.814146**	**1.356789**
poorsleep_2006tert	**.1119679**	**.0257525**	**4.35**	**0.000**	**.0602454**	**.1636904**
c.hurd_dem#c.poorsleep_2006tert	**-.2158695**	**.0687619**	**-3.14**	**0.003**	**-.3539744**	**-.0777647**
AGE2006	**.0903409**	**.0028383**	**31.83**	**0.000**	**.0846403**	**.0960414**
SEX	**-.369506**	**.0345482**	**-10.70**	**0.000**	**-.4388944**	**-.3001177**
NonWhite	**.0253513**	**.0476099**	**0.53**	**0.597**	**-.0702708**	**.1209734**

Multiple-imputation estimates Imputations = **5**
Survey: Cox regression Number of obs = **6,951**

Number of strata = **52** Population size = **22,747,247**
Number of PSUs = **104** Subpop. no. obs = **6,718**
Subpop. size = **22,734,819**
Average RVI = **0.0000**
Largest FMI = **0.0000**
Complete DF = **52**
DF adjustment: **Small sample** DF: min = **50.11**
avg = **50.11**
max = **50.11**
Model F test: **Equal FMI** F(**6**, **50.1**) = **349.31**
Within VCE type: **Linearized** Prob > F = **0.0000**

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
expert_dem	**1.129645**	**.1379274**	**8.19**	**0.000**	**.8526247**	**1.406665**
poorsleep_2006tert	**.1084854**	**.0250041**	**4.34**	**0.000**	**.0582658**	**.158705**
c.expert_dem#c.poorsleep_2006tert	**-.2091987**	**.0662361**	**-3.16**	**0.003**	**-.3422307**	**-.0761666**
AGE2006	**.0912626**	**.002837**	**32.17**	**0.000**	**.0855647**	**.0969605**
SEX	**-.3806953**	**.0318178**	**-11.96**	**0.000**	**-.4445997**	**-.3167909**
NonWhite	**.0221213**	**.0506765**	**0.44**	**0.664**	**-.0796599**	**.1239026**

Multiple-imputation estimates Imputations = **5**
Survey: Cox regression Number of obs = **6,951**

```
Number of strata  =        52                 Population size   =  22,747,247
Number of PSUs    =       104                 Subpop. no. obs   =       6,718
                                              Subpop. size      =  22,734,819
                                              Average RVI       =      0.0000
                                              Largest FMI       =      0.0000
                                              Complete DF       =          52
DF adjustment:   Small sample                 DF:     min       =       50.11
                                                      avg       =       50.11
                                                      max       =       50.11
Model F test:       Equal FMI                 F(   6,   50.1)   =      349.19
Within VCE type:   Linearized                 Prob > F          =      0.0000
```

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lasso_dem	1.018072	.1422764	7.16	0.000	.7323172	1.303827
poorsleep_2006tert	.1119962	.0273358	4.10	0.000	.0570935	.1668989
c.lasso_dem#c.poorsleep_2006tert	-.1771083	.0694481	-2.55	0.014	-.3165914	-.0376252
AGE2006	.0908296	.0028719	31.63	0.000	.0850615	.0965977
SEX	-.3835457	.0328573	-11.67	0.000	-.4495379	-.3175535
NonWhite	.0062484	.0505618	0.12	0.902	-.0953024	.1077992

```
79 .
80 . ***MODEL 2****
81 . foreach x of varlist  lnhurd_odds lnexpert_odds lnlasso_odds {
  2. mi estimate: svy, subpop(sample_final): stcox c.`x'##c.poorsleep_2006tert AGE2006 SEX NonWhite i.education
> _2006 cardiometcondbr_2006 cesd_2006
  3.
82 . }

Multiple-imputation estimates                 Imputations       =           5
Survey: Cox regression                        Number of obs     =       6,601

Number of strata  =        52                 Population size   =  21,648,399
Number of PSUs    =       104                 Subpop. no. obs   =       6,368
                                              Subpop. size      =  21,635,971
                                              Average RVI       =      0.0013
                                              Largest FMI       =      0.0109
                                              Complete DF       =          52
DF adjustment:   Small sample                 DF:     min       =       49.60
                                                      avg       =       50.08
                                                      max       =       50.11
Model F test:       Equal FMI                 F(  26,   50.1)   =      114.42
Within VCE type:   Linearized                 Prob > F          =      0.0000
```

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lnhurd_odds	.1749499	.0239866	7.29	0.000	.1267739	.223126
poorsleep_2006tert	-.2132151	.0466523	-4.57	0.000	-.3069144	-.1195157
c.lnhurd_odds#c.poorsleep_2006tert	-.0417964	.0100531	-4.16	0.000	-.0619877	-.0216051
AGE2006	.0771311	.0044268	17.42	0.000	.0682401	.086022
SEX	-.3779381	.0360184	-10.49	0.000	-.4502801	-.305596
NonWhite	-.2477377	.0565017	-4.38	0.000	-.3612207	-.1342547
education						
2	-.1975603	.1071303	-1.84	0.071	-.4127265	.017606
3	-.0219093	.047479	-0.46	0.646	-.1172688	.0734502

4	-.0489194	.0630563	-0.78	0.442	-.1755651	.0777262
5	-.066638	.0567995	-1.17	0.246	-.1807173	.0474413
totwealth_2006						
2	-.0512237	.043261	-1.18	0.242	-.1381117	.0356642
3	.0429378	.0976266	0.44	0.662	-.1531406	.2390162
4	-.3794753	.3001355	-1.26	0.212	-.9823176	.2233671
5	-1.728692	1.120174	-1.54	0.129	-3.978506	.5211223
marital_2006						
2	-.1887643	.110229	-1.71	0.093	-.4101541	.0326254
3	-.0695732	.1382504	-0.50	0.617	-.3472425	.2080961
4	-.0850558	.112542	-0.76	0.453	-.3110909	.1409793
work_st_2006	-.0737385	.051278	-1.44	0.157	-.1767281	.0292511
smoking_2006						
2	.2855977	.0420133	6.80	0.000	.2012151	.3699802
3	.6883278	.0758446	9.08	0.000	.5359588	.8406968
physic_act_2006	-.1685769	.0250502	-6.73	0.000	-.2188895	-.1182642
2.srh_2006	.3372147	.0427196	7.89	0.000	.2514133	.4230161
bmibr_2006						
2	-.2192049	.0465665	-4.71	0.000	-.3127318	-.125678
3	-.1426692	.0511832	-2.79	0.007	-.2454682	-.0398702
cardiometcondbr_2006	.299661	.0340815	8.79	0.000	.2312099	.3681121
cesd_2006	.0075621	.0108139	0.70	0.488	-.0141574	.0292816

Multiple-imputation estimates — Imputations = 5
Survey: Cox regression — Number of obs = 6,601

Number of strata = 52 — Population size = 21,648,399
Number of PSUs = 104 — Subpop. no. obs = 6,368
Subpop. size = 21,635,971
Average RVI = 0.0015
Largest FMI = 0.0111
Complete DF = 52
DF adjustment: **Small sample** — DF: min = 49.58
avg = 50.07
max = 50.11
Model F test: **Equal FMI** — F(26, 50.1) = 120.93
Within VCE type: **Linearized** — Prob > F = 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lnexpert_odds	.1710346	.0210722	8.12	0.000	.1287119	.2133572
poorsleep_2006tert	-.1944462	.04864	-4.00	0.000	-.2921378	-.0967547
c.lnexpert_odds#c.poorsleep_2006tert	-.0383963	.0099172	-3.87	0.000	-.0583146	-.0184779
AGE2006	.0768209	.0042958	17.88	0.000	.068193	.0854488
SEX	-.3730366	.0369071	-10.11	0.000	-.4471634	-.2989098
NonWhite	-.221757	.0556382	-3.99	0.000	-.3335058	-.1100082
education						
2	-.154353	.099881	-1.55	0.129	-.3549595	.0462536
3	.0053477	.0466785	0.11	0.909	-.088404	.0990995
4	-.0352723	.062917	-0.56	0.578	-.1616381	.0910934
5	-.0580547	.0580211	-1.00	0.322	-.1745876	.0584782

totwealth_2006						
2	-.0521565	.0428662	-1.22	0.229	-.1382516	.0339386
3	.0422774	.1001366	0.42	0.675	-.1588423	.2433971
4	-.3861926	.3001468	-1.29	0.204	-.9890636	.2166784
5	-1.761547	1.137356	-1.55	0.128	-4.045871	.5227775
marital_2006						
2	-.1616528	.1101334	-1.47	0.148	-.3828505	.0595449
3	-.062965	.1358821	-0.46	0.645	-.3358777	.2099476
4	-.0801564	.1122082	-0.71	0.478	-.3055211	.1452083
work_st_2006	-.086426	.051558	-1.68	0.100	-.1899779	.0171259
smoking_2006						
2	.2964546	.0426751	6.95	0.000	.2107433	.382166
3	.6797252	.0760506	8.94	0.000	.5269413	.8325091
physic_act_2006	-.1589317	.0259443	-6.13	0.000	-.2110401	-.1068233
2.srh_2006	.3371401	.0426408	7.91	0.000	.2514968	.4227834
bmibr_2006						
2	-.2210144	.0476395	-4.64	0.000	-.3166965	-.1253323
3	-.1416495	.0535393	-2.65	0.011	-.2491807	-.0341183
cardiometcondbr_2006	.2836093	.0346717	8.18	0.000	.2139729	.3532457
cesd_2006	.0057175	.0107272	0.53	0.596	-.015828	.027263

Multiple-imputation estimates — Imputations = 5
Survey: Cox regression — Number of obs = 6,601

Number of strata = 52 — Population size = 21,648,399
Number of PSUs = 104 — Subpop. no. obs = 6,368
Subpop. size = 21,635,971
Average RVI = 0.0016
Largest FMI = 0.0120
Complete DF = 52
DF adjustment: **Small sample** — DF: min = 49.53
avg = 50.07
max = 50.11
Model F test: **Equal FMI** — F(26, 50.1) = 117.70
Within VCE type: **Linearized** — Prob > F = 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lnlasso_odds	.2426403	.0283888	8.55	0.000	.1856225	.299658
poorsleep_2006tert	-.2007573	.0486173	-4.13	0.000	-.2984035	-.1031111
c.lnlasso_odds#c.poorsleep_2006tert	-.051771	.0132235	-3.92	0.000	-.0783299	-.0252122
AGE2006	.0776258	.0042029	18.47	0.000	.0691845	.0860671
SEX	-.4196412	.0359229	-11.68	0.000	-.4917914	-.347491
NonWhite	-.2153637	.0552095	-3.90	0.000	-.3262518	-.1044756
education						
2	-.1269624	.1008005	-1.26	0.214	-.3294157	.0754909
3	.0328451	.0472768	0.69	0.490	-.0621082	.1277984
4	.0059709	.063696	0.09	0.926	-.1219594	.1339012
5	-.0158948	.0578891	-0.27	0.785	-.1321625	.1003729
totwealth_2006						

2	-.0458422	.0429242	-1.07	0.291	-.1320538	.0403695
3	.0498717	.0975138	0.51	0.611	-.1459801	.2457236
4	-.3788	.2964861	-1.28	0.207	-.9743252	.2167251
5	-1.802675	1.124925	-1.60	0.115	-4.062032	.4566817
marital_2006						
2	-.1812643	.111006	-1.63	0.109	-.4042145	.0416859
3	-.0512514	.1367522	-0.37	0.709	-.3259116	.2234088
4	-.0797803	.1134553	-0.70	0.485	-.3076497	.1480891
work_st_2006	-.0800565	.0503894	-1.59	0.118	-.1812614	.0211483
smoking_2006						
2	.2957543	.0423251	6.99	0.000	.2107456	.3807629
3	.6847578	.0767026	8.93	0.000	.5306598	.8388558
physic_act_2006	-.1569009	.0253503	-6.19	0.000	-.2078162	-.1059857
2.srh_2006	.3455989	.0429917	8.04	0.000	.2592509	.431947
bmibr_2006						
2	-.1951313	.0479514	-4.07	0.000	-.2914397	-.0988229
3	-.088896	.0529915	-1.68	0.100	-.1953269	.017535
cardiometcondbr_2006	.2922924	.0350378	8.34	0.000	.2219207	.3626641
cesd_2006	.0058638	.0105052	0.56	0.579	-.0152359	.0269636

```
83 .
84 .
85 .
86 . foreach x of varlist  hurd_dem expert_dem lasso_dem {
  2. mi estimate: svy, subpop(sample_final): stcox c.`x'##c.poorsleep_2006tert AGE2006 SEX NonWhite i.education
> _2006 cardiometcondbr_2006 cesd_2006
  3.
87 . }
```

Multiple-imputation estimates — Imputations = 5
Survey: Cox regression — Number of obs = 6,601

Number of strata = 52 — Population size = 21,648,399
Number of PSUs = 104 — Subpop. no. obs = 6,368
Subpop. size = 21,635,971
Average RVI = 0.0012
Largest FMI = 0.0090
Complete DF = 52
DF adjustment: **Small sample** — DF: min = 49.70
avg = 50.08
max = 50.11
Model F test: **Equal FMI** — F(26, 50.1) = 101.30
Within VCE type: **Linearized** — Prob > F = 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
hurd_dem	.9377182	.1461543	6.42	0.000	.6441726	1.231264
poorsleep_2006tert	-.0144417	.0296407	-0.49	0.628	-.0739742	.0450907
c.hurd_dem#c.poorsleep_2006tert	-.2836307	.0808918	-3.51	0.001	-.4460987	-.1211628
AGE2006	.0884143	.0040494	21.83	0.000	.0802811	.0965474
SEX	-.4183487	.0380139	-11.01	0.000	-.4946987	-.3419987
NonWhite	-.1725458	.0572266	-3.02	0.004	-.2874848	-.0576068

education						
2	-.1660778	.1053236	-1.58	0.121	-.3776154	.0454597
3	-.029144	.0477255	-0.61	0.544	-.1249984	.0667103
4	-.069639	.0626799	-1.11	0.272	-.1955286	.0562506
5	-.1270714	.0577682	-2.20	0.032	-.2430961	-.0110466
totwealth_2006						
2	-.0728335	.0430694	-1.69	0.097	-.1593366	.0136696
3	.0199337	.1004672	0.20	0.844	-.1818498	.2217173
4	-.4179996	.315621	-1.32	0.191	-1.05193	.215931
5	-1.756916	1.071995	-1.64	0.107	-3.909966	.3961333
marital_2006						
2	-.1654564	.1081573	-1.53	0.132	-.3826852	.0517723
3	-.0411272	.1382815	-0.30	0.767	-.318859	.2366046
4	-.0712454	.1115441	-0.64	0.526	-.2952764	.1527856
work_st_2006	-.1275959	.0529638	-2.41	0.020	-.2339712	-.0212206
smoking_2006						
2	.2790452	.0413052	6.76	0.000	.1960854	.3620051
3	.6769114	.0763386	8.87	0.000	.5235581	.8302646
physic_act_2006	-.1791212	.0253427	-7.07	0.000	-.2300214	-.128221
2.srh_2006	.3446739	.0434636	7.93	0.000	.2573783	.4319695
bmibr_2006						
2	-.224784	.047299	-4.75	0.000	-.3197822	-.1297857
3	-.1543817	.0517291	-2.98	0.004	-.2582774	-.0504861
cardiometcondbr_2006	.311433	.0338622	9.20	0.000	.2434222	.3794437
cesd_2006	.0122099	.0105164	1.16	0.251	-.0089122	.033332

Multiple-imputation estimates — Imputations = 5
Survey: Cox regression — Number of obs = 6,601

Number of strata = 52 — Population size = 21,648,399
Number of PSUs = 104 — Subpop. no. obs = 6,368
Subpop. size = 21,635,971
Average RVI = 0.0014
Largest FMI = 0.0082
Complete DF = 52
DF adjustment: **Small sample** — DF: min = 49.75
avg = 50.08
max = 50.11
Model F test: **Equal FMI** — F(26, 50.1) = 122.67
Within VCE type: **Linearized** — Prob > F = 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
expert_dem	.9970413	.1474877	6.76	0.000	.7008169	1.293266
poorsleep_2006tert	-.0127078	.029498	-0.43	0.668	-.0719538	.0465382
c.expert_dem#c.poorsleep_2006tert	-.2829288	.0798539	-3.54	0.001	-.4433123	-.1225452
AGE2006	.0893361	.0039855	22.42	0.000	.0813313	.0973409
SEX	-.4170394	.0357826	-11.65	0.000	-.488908	-.3451708
NonWhite	-.171871	.0578511	-2.97	0.005	-.2880637	-.0556783
education						
2	-.1772536	.104373	-1.70	0.096	-.3868819	.0323748

3	-.0163179	.0453368	-0.36	0.720	-.107375	.0747391
4	-.0647019	.0615199	-1.05	0.298	-.1882617	.0588579
5	-.1113021	.0575602	-1.93	0.059	-.2269091	.004305
totwealth_2006						
2	-.0831335	.0405493	-2.05	0.046	-.1645751	-.0016919
3	.0055421	.1006129	0.06	0.956	-.1965342	.2076184
4	-.4761805	.3017712	-1.58	0.121	-1.082316	.1299548
5	-1.762522	1.071765	-1.64	0.106	-3.915109	.3900644
marital_2006						
2	-.1615853	.1097522	-1.47	0.147	-.3820173	.0588467
3	-.0493675	.1372367	-0.36	0.721	-.3250009	.2262659
4	-.0761572	.112522	-0.68	0.502	-.3021522	.1498378
work_st_2006	-.1197913	.0522073	-2.29	0.026	-.2246473	-.0149353
smoking_2006						
2	.2965076	.0424377	6.99	0.000	.2112733	.3817419
3	.6866588	.0758708	9.05	0.000	.5342489	.8390687
physic_act_2006	-.1706604	.0253453	-6.73	0.000	-.2215656	-.1197551
2.srh_2006	.3474646	.0427467	8.13	0.000	.2616088	.4333203
bmibr_2006						
2	-.2259728	.0469065	-4.82	0.000	-.3201828	-.1317628
3	-.1449213	.0506016	-2.86	0.006	-.2465523	-.0432903
cardiometcondbr_2006	.3012299	.0355999	8.46	0.000	.2297292	.3727306
cesd_2006	.0104979	.0110457	0.95	0.346	-.0116872	.032683

Multiple-imputation estimates — Imputations = 5
Survey: Cox regression — Number of obs = 6,601

Number of strata = 52 — Population size = 21,648,399
Number of PSUs = 104 — Subpop. no. obs = 6,368
Subpop. size = 21,635,971
Average RVI = 0.0012
Largest FMI = 0.0093
Complete DF = 52
DF adjustment: **Small sample** — DF: min = 49.69
avg = 50.08
max = 50.11
Model F test: **Equal FMI** — F(26, 50.1) = 116.83
Within VCE type: **Linearized** — Prob > F = 0.0000

_t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
lasso_dem	1.023031	.1623523	6.30	0.000	.6969535	1.349109
poorsleep_2006tert	-.0047424	.0288958	-0.16	0.870	-.0627787	.0532939
c.lasso_dem#c.poorsleep_2006tert	-.3197981	.0911661	-3.51	0.001	-.502901	-.1366953
AGE2006	.0887508	.0038847	22.85	0.000	.0809485	.0965531
SEX	-.4293573	.0359499	-11.94	0.000	-.501562	-.3571527
NonWhite	-.1851087	.0572555	-3.23	0.002	-.3001052	-.0701121
education						
2	-.1684132	.1044344	-1.61	0.113	-.3781648	.0413384
3	-.0144133	.0472688	-0.30	0.762	-.1093507	.0805241
4	-.0579095	.0621269	-0.93	0.356	-.1826885	.0668694

5	-.1129252	.0560495	-2.01	0.049	-.225498	-.0003523
totwealth_2006						
2	-.0850882	.042481	-2.00	0.051	-.1704095	.000233
3	.0078259	.1017782	0.08	0.939	-.1965907	.2122426
4	-.4762351	.3002882	-1.59	0.119	-1.079387	.1269169
5	-1.755922	1.070541	-1.64	0.107	-3.906051	.3942061
marital_2006						
2	-.1566117	.1090128	-1.44	0.157	-.3755587	.0623353
3	-.0362044	.1351511	-0.27	0.790	-.3076488	.2352401
4	-.0751517	.1117654	-0.67	0.504	-.2996271	.1493238
work_st_2006	-.1229179	.0527888	-2.33	0.024	-.2289418	-.0168941
smoking_2006						
2	.280937	.0416019	6.75	0.000	.1973812	.3644927
3	.6655604	.0732416	9.09	0.000	.5184274	.8126933
physic_act_2006	-.1727809	.0246495	-7.01	0.000	-.2222886	-.1232732
2.srh_2006	.3604938	.0428944	8.40	0.000	.2743413	.4466463
bmibr_2006						
2	-.2214786	.0465794	-4.75	0.000	-.3150315	-.1279257
3	-.1404734	.0502521	-2.80	0.007	-.2414025	-.0395442
cardiometcondbr_2006	.3076747	.0334487	9.20	0.000	.2404944	.374855
cesd_2006	.011996	.0108636	1.10	0.275	-.0098233	.0338153

```
88 .
89 . capture log close
```