(36,394 missing values generated)

```
____ (R)
/__ / ___/ / ___/
__/ / /___/ / /___/
Statistics/Data analysis
```

```
1 .
3 . **STEP 17: TABLE 3: MED4WAY FOR POOR SLEEP AS EXPOSURE, DIFFERENT PROBABILITIES OF DEMENTIA AS MEDIATORS, AND A
4 .
5 . **COVARIATES: NonWhite AGE2006 SEX i.education i.totwealth_2006 marital_2006 work_st_2006 i.smoking_2006 phys
6.
7 . use finaldata_imputed_FINAL,clear
8.
9.
10 .
11 . capture drop lnhurd_odds
12 . mi passive: gen lnhurd_odds=ln((hurd_p)/(1-hurd_p))
   m=0:
   (35,952 missing values generated)
   m=1:
   (35,952 missing values generated)
   (35,952 missing values generated)
   m=3:
   (35,952 missing values generated)
   m=4:
   (35,952 missing values generated)
   (35,952 missing values generated)
13 .
14 . capture drop lnexpert_odds
15 . mi passive: gen lnexpert_odds=ln((expert_p)/(1-expert_p))
   (35,850 missing values generated)
   m=1:
   (35,850 missing values generated)
   m=2:
   (35,850 missing values generated)
   m=3:
   (35,850 missing values generated)
   (35,850 missing values generated)
   m=5:
   (35,850 missing values generated)
16 .
17 .
18 . capture drop lnlasso odds
19 . mi passive: gen lnlasso_odds=ln((lasso_p)/(1-lasso_p))
   m=0:
   (36,394 missing values generated)
   m=1:
   (36,394 missing values generated)
   m=2:
   (36,394 missing values generated)
   m=3:
   (36,394 missing values generated)
   m=4:
   (36,394 missing values generated)
   m=5:
```

```
20 .
21 .
22 . capture drop Men
23 . mi passive: gen Men=1 if SEX==1 & sample_final==1
   (40,630 missing values generated)
  m=1:
   (40,630 missing values generated)
   (40,630 missing values generated)
   (40,630 missing values generated)
  m=4:
   (40,630 missing values generated)
   (40,630 missing values generated)
24 . mi passive: replace Men=0 if Men~=1 & SEX~=. & sample_final==1
   (4,060 real changes made)
  m=1:
   (4,060 real changes made)
  m=2:
   (4,060 real changes made)
  m=3:
   (4,060 real changes made)
  m=4:
   (4,060 real changes made)
  m=5:
   (4,060 real changes made)
25 .
26 . capture drop Women
27 . mi passive: gen Women=1 if SEX==2 & sample_final==1
  m=0:
   (39,501 missing values generated)
   (39,501 missing values generated)
   m=2:
   (39,501 missing values generated)
   (39,501 missing values generated)
  m=4:
   (39,501 missing values generated)
   (39,501 missing values generated)
28 . mi passive: replace Women=0 if Women~=1 & SEX~=. & sample_final==1
  m=0:
   (2,931 real changes made)
  m=1:
   (2,931 real changes made)
   (2,931 real changes made)
  m=3:
  (2,931 real changes made)
  m=4:
   (2,931 real changes made)
  (2,931 real changes made)
```

```
32 . mi passive: replace NHW=0 if NHW~=1 & RACE_ETHN~=. & sample_final==1
  m=3:
  (1,325 real changes made)
  m=4:
  (1,325 real changes made)
  m=5:
  (1,325 real changes made)
34 . capture drop NHB
35 . mi passive: gen NHB=1 if RACE_ETHN==2 & sample_final==1
   (42,705 missing values generated)
  m=1:
   (42,705 missing values generated)
   (42,705 missing values generated)
  m=3:
  (42,705 missing values generated)
  m=4:
  (42,705 missing values generated)
  (42,705 missing values generated)
36 . mi passive: replace NHB=0 if NHB~=1 & RACE_ETHN~=. & sample_final==1
  m=0:
   (6,135 real changes made)
  m=1:
   (6,135 real changes made)
  m=2:
   (6,135 real changes made)
  m=3:
   (6,135 real changes made)
  m=4:
```

(6,135 real changes made)

(6,135 real changes made)

m=5:

```
37 .
38 .
39 . capture drop HISP
40 . mi passive: gen HISP=1 if RACE_ETHN==3 & sample_final==1
  (43,092 missing values generated)
  m=1:
   (43,092 missing values generated)
  m=2:
   (43,092 missing values generated)
   m=3:
  (43,092 missing values generated)
  m=4:
  (43,092 missing values generated)
   (43,092 missing values generated)
41 . mi passive: replace HISP=0 if HISP~=1 & RACE_ETHN~=. & sample_final==1
   (6,522 real changes made)
  m=1:
   (6,522 real changes made)
  m=2:
   (6,522 real changes made)
  m=3:
  (6,522 real changes made)
  m=4:
  (6,522 real changes made)
  m=5:
  (6,522 real changes made)
42 .
43 .
44 . capture drop OTHER
45 . mi passive: gen OTHER=1 if RACE_ETHN==4 & sample_final==1
   (43,561 missing values generated)
   (43,561 missing values generated)
   m=2:
   (43,561 missing values generated)
  m=3:
  (43,561 missing values generated)
  (43,561 missing values generated)
  m=5:
  (43,561 missing values generated)
46 . mi passive: replace OTHER=0 if OTHER~=1 & RACE_ETHN~=. & sample_final==1
   (6,991 real changes made)
  m=1:
   (6,991 real changes made)
  m=2:
   (6,991 real changes made)
  m=3:
   (6,991 real changes made)
  m=4:
   (6,991 real changes made)
   m=5:
   (6,991 real changes made)
```

```
47 .
48 .
49 . capture drop NonWhite
50 . mi passive: gen NonWhite=0 if RACE_ETHN==1 & sample_final==1
   (passive variable NonWhite unregistered because not in m=0)
   (37,895 missing values generated)
   m=1:
   (37,895 missing values generated)
   m=2:
   (37,895 missing values generated)
   m=3:
   (37,895 missing values generated)
   (37,895 missing values generated)
   m=5:
   (37,895 missing values generated)
51 . mi passive: replace NonWhite=1 if RACE_ETHN!=1 & RACE_ETHN!=. & sample_final==1
   m=0:
   (1,325 real changes made)
   m=1:
   (1,325 real changes made)
   m=2:
   (1,325 real changes made)
   m=3:
   (1,325 real changes made)
   m=4:
   (1,325 real changes made)
   (1,325 real changes made)
52 .
53 . save, replace
   (file C:\Users\baydounm\AppData\Local\Temp\ST_6434_000002.tmp not found)
   file C:\Users\baydounm\AppData\Local\Temp\ST_6434_000002.tmp saved as .dta format
55 . capture mi stset ageevent [pweight = kwgtr] if sample_final==1, failure(died==1) enter(AGE2006) origin(AGE2006)
57 . capture drop educationg* totalwealth_2006g* marital_2006g* smoking_2006g* physic_act_2006g* srh_2006g* bmibr_20
58 .
59 . tab education,generate(educationg)
```

education	Freq.	Percent	Cum.
1	64,385	25.42	25.42
2	12,398	4.89	30.32
3	71,253	28.13	58.45
4	56,752	22.41	80.85
5	48,493	19.15	100.00
Total	253,281	100.00	

61 . tab totwealth_2006, generate(totalwealth_2006g)

totwealth_2 006	Freq.	Percent	Cum.
1	38,448	34.70	34.70
2	60,978	55.03	89.72
3	9,396	8.48	98.20
4	1,554	1.40	99.60
5	438	0.40	100.00
Total	110,814	100.00	

62 .

63 . tab marital_2006, generate(marital_2006g)

marital_200 6	Freq.	Freq. Percent		
1	3,277	2.96	2.96	
2	72,317	65.26	68.22	
3	12,157	10.97	79.19	
4	23,061	20.81	100.00	
Total	110,812	100.00		

65 . tab smoking_2006, generate(smoking_2006g)

smoking_200 6	Freq.	Percent	Cum.
1	47,368	42.89	42.89
2	47,821	43.30	86.19
3	15,250	13.81	100.00
Total	110,439	100.00	

66 .
67 . tab physic_act_2006, generate(physic_act_2006g)

physic_act_ 2006	Freq.	Percent	Cum.
1	24,705	22.30	22.30
2	22,890	20.66	42.96
3	63,187	57.04	100.00
Total	110,782	100.00	

68 .

69 . tab srh_2006, generate(srh_2006g)

Cum.	Percent	Freq.	srh_2006	
70.01 100.00	70.01 29.99	77,555 33,219	1 2	
	100.00	110,774	Total	

70 .

71 . tab bmibr_2006, generate(bmibr_2006g)

bmibr_2006	Freq.	Percent	Cum.
1	35,584	32.25	32.25
2	41,644	37.74	69.99
3	33,113	30.01	100.00
Total	110,341	100.00	

72 .

73 . tab cardiometcondbr_2006, generate(cardiometcondbr_2006g)

cardiometco ndbr_2006	Freq.	Freq. Percent	
1	37,632	33.96	33.96
2	63,186	57.02	90.98
3	9,996	9.02	100.00
Total	110,814	100.00	

```
74 .
```

75 .

76 .

80 . capture drop zpoorsleep 2006

- 81 . capture drop zpoorsleepalt_2006
- 82 . capture drop zlnhurd_odds
- 83 . capture drop zlnexpert_odds
- 84 . capture drop zlnlasso_odds
- 85 . foreach x of varlist poorsleep_2006 poorsleepalt_2006 lnhurd_odds lnexpert_odds lnlasso_odds { mi passive: egen z`x'=std(`x') if sample_final==1 2.
 - 3. }

m=0:

(36,570 missing values generated)

m=1:

(36,570 missing values generated)

m=2:

(36,570 missing values generated)

m=3:

(36,570 missing values generated)

(36,570 missing values generated)

m=5:

(36,570 missing values generated) (36,570 missing values generated) m=1: (36,570 missing values generated) m=2: (36,570 missing values generated) m=3: (36,570 missing values generated) (36,570 missing values generated) m=5: (36,570 missing values generated) m=0: (36,570 missing values generated) (36,570 missing values generated) m=2: (36,570 missing values generated) m=3: (36,570 missing values generated) m=4: (36,570 missing values generated) m=5: (36,570 missing values generated) m=0: (36,570 missing values generated) m=1: (36,570 missing values generated) m=2: (36,570 missing values generated) (36,570 missing values generated) m=4: (36,570 missing values generated) m=5: (36,570 missing values generated) (36,570 missing values generated) (36,570 missing values generated) m=2: (36,570 missing values generated) m=3: (36,570 missing values generated) (36,570 missing values generated) m=5: (36,570 missing values generated)

```
Tuesday December 12 08:01:14 2023 Page 9
 87 . save, replace
    (file C:\Users\baydounm\AppData\Local\Temp\ST_6434_000002.tmp not found)
    file C:\Users\baydounm\AppData\Local\Temp\ST_6434\_000002.tmp saved as .dta format
 88 .
 89 .
 90 .
 92 . foreach m of varlist zlnhurd odds zlnexpert odds zlnlasso odds {
      2. mi estimate, cmdok esampvaryok: med4way zpoorsleep 2006 `m' AGE2006 SEX NonWhite educationg* totwealth 2006
    > * zcesd_2006 if sample_final==1 , a0(0) a1(1) m(0) yreg(cox) mreg(linear)
    variable zcesd_2006 not found
    an error occurred when mi estimate executed med4way on m=1
    r(111);
    end of do-file
    r(111);
 93 . do "C:\Users\baydounm\AppData\Local\Temp\STD6434_000000.tmp"
 94 .
 95 . mi passive: egen zcesd 2006=std(cesd 2006) if sample final==1
    (37,051 missing values generated)
    m=1:
    (37,051 missing values generated)
   m=2:
    (37,051 missing values generated)
    (37,051 missing values generated)
   m=4:
    (37,051 missing values generated)
   m=5:
    (37,051 missing values generated)
 96 .
 97 . save, replace
    (file C:\Users\baydounm\AppData\Local\Temp\ST_6434_000002.tmp not found)
   file C:\Users\baydounm\AppData\Local\Temp\ST_6434_000002.tmp saved as .dta format
 98 .
99 .
100 .
102 . foreach m of varlist zlnhurd odds zlnexpert odds zlnlasso odds {
      2. mi estimate, cmdok esampvaryok: med4way zpoorsleep_2006 `m' AGE2006 SEX NonWhite educationg* totwealth_2006
    > * zcesd_2006 if sample_final==1 , a0(0) a1(1) m(0) yreg(cox) mreg(linear)
     3. }
    Warning: this analysis assumes a rare outcome.
    Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu
    > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l
    > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.
    type mismatch: exp.exp: transmorphic found where struct expected
    r(3000);
    end of do-file
```

r(3000);

103 . do "C:\Users\baydounm\AppData\Local\Temp\STD6434_000000.tmp"

104 .

105 . foreach m of varlist zlnhurd odds zlnexpert odds zlnlasso odds {

2. mi estimate, cmdok esampvaryok: med4way zpoorsleep 2006 `m' AGE2006 SEX NonWhite educationg* totwealth 2006 > * zcesd_2006 if sample_final==1 , a0(0) a1(1) m(0) yreg(cox) mreg(linear)

3. }

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l > ndbr 2006g3 zcesd 2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l > ndbr 2006g3 zcesd 2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l > ndbr 2006g3 zcesd 2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Multiple-imputation estimates		Imputations	=	5
		Number of obs	=	6,510
		Average RVI	=	0.0001
		Largest FMI	=	0.0001
DF adjustment:	Large sample	DF: min	=	3.23e+08
		avg	=	7.60e+09
		max	=	2.57e+10

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	0653792	.0161437	-4.05	0.000	0970203	0337381
ereri_cde	0639995	.0164227	-3.90	0.000	0961873	0318116
ereri_intref	.0055301	.0017506	3.16	0.002	.002099	.0089611
ereri_intmed	.003625	.0011361	3.19	0.001	.0013982	.0058517
ereri_pie	0105348	.0029528	-3.57	0.000	0163221	0047474

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l > ndbr 2006g3 zcesd 2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educ > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 > 6g1 smoking 2006g2 smoking 2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l

> ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu

> 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l
> ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Multiple-imputat	ion estimates	Imputations	=	5
		Number of obs	=	6,510
		Average RVI	=	0.0001
		Largest FMI	=	0.0002
DF adjustment:	Large sample	DF: min	=	1.14e+08
		avg	=	3.84e+09
		max	=	9.28e+09

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri ereri_cde ereri_intref ereri_intmed ereri_pie	0667337 0589408 .0007869 .0039057 0124855	.0161466 .0163506 .0012523 .0011079 .003035	-4.13 -3.60 0.63 3.53 -4.11	0.000 0.000 0.530 0.000 0.000	0983804 0909873 0016675 .0017344 0184339	0350869 0268942 .0032413 .0060771 0065371

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 sedicationg3 sedicationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg4 educationg5 educationg4 educationg5 educationg5 educationg4 educationg5 educationg6 educationg7 educationg6 educationg6 educationg7 e

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 landbases and applications and applications are smoothly applicated and applicated and

> ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 sedicationg3 sedicationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 e

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 sedicationg3 sedicationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg4 educationg2 educationg3 educationg4 e

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 sedicationg3 sedicationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 e

Multiple-imputation estimates		Imputations	=	5
		Number of obs	=	6,510
		Average RVI	=	0.0001
		Largest FMI	=	0.0002
DF adjustment: Large sample		DF: min	=	1.60e+08
		avg	=	4.82e+09
		max	=	6.96e+09
		1.1		

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	0684043	.0160811	-4.25	0.000	0999227	0368859
ereri_cde	0595854	.0164094	-3.63	0.000	0917473	0274235
ereri_intref	.0022245	.0013284	1.67	0.094	0003792	.0048282
ereri_intmed	.0044225	.0011574	3.82	0.000	.0021541	.0066908
ereri_pie	0154659	.0032987	-4.69	0.000	0219312	0090006

```
106 .
107 .
108 . *****SENSITIVITY ANALYSIS, OVERALL******
109 .
110 . foreach m of varlist zlnhurd odds zlnexpert odds zlnlasso odds {
      2. mi estimate, cmdok esampvaryok: med4way zpoorsleepalt_2006 `m' AGE2006 SEX NonWhite educationg* totwealth 2
    > 06g* zcesd_2006 if sample_final==1 , a0(0) a1(1) m(0) yreg(cox) mreg(linear)
      3. }
    Warning: this analysis assumes a rare outcome.
    Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu
    > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l
    > ndbr 2006g3 zcesd 2006 were not provided. All covariates are fixed at their respective mean.
    Warning: this analysis assumes a rare outcome.
    Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu
    > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l
    > ndbr 2006g3 zcesd 2006 were not provided. All covariates are fixed at their respective mean.
    Warning: this analysis assumes a rare outcome.
    Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu
    > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l
    > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.
    Warning: this analysis assumes a rare outcome.
    Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu
```

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 londbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 sedicationg3 sedicationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 e

Multiple-imputation estimates Imputations Number of obs 6,510 Average RVI 0.0001 Largest FMI 0.0001 DF adjustment: DF: 3.59e+08 Large sample min 1.24e+10 avg 3.23e+10 max

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	0713071	.0159959	-4.46	0.000	1026585	0399556
ereri_cde	0696972	.0162731	-4.28	0.000	1015919	0378025
ereri_intref	.0056935	.0017507	3.25	0.001	.0022622	.0091248
ereri_intmed	.0039003	.0011567	3.37	0.001	.0016332	.0061674
ereri_pie	0112037	.0029377	-3.81	0.000	0169615	0054459

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 by https://doi.org/10.0006g3 rds.

> ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 by ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 londbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Multiple-imputation estimates		Imputati	ions	=	5
		Number o	of obs	=	6,510
		Average	RVI	=	0.0001
		Largest	FMI	=	0.0002
DF adjustment:	Large sample	DF:	min	=	1.16e+08
			avg	=	6.21e+09
			max	=	1.34e+10

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri ereri_cde ereri_intref ereri_intmed ereri pie	0724546 0650126 .0008955 .0038437 0121812	.0160052 .0161977 .0012469 .0010987	-4.53 -4.01 0.72 3.50 -4.05	0.000 0.000 0.473 0.000	1038243 0967596 0015484 .0016903 0180693	0410849 0332657 .0033395 .005997 0062931

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg3 seducationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 long12006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 sedicationg3 sedicationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 e

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 lphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 long1 act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Multiple-imputation estimates		Imputations	=	5
		Number of obs	=	6,510
		Average RVI	=	0.0001
		Largest FMI	=	0.0002
DF adjustment:	Large sample	DF: min	=	1.75e+08
		avg	=	1.03e+10
		max	=	1.99e+10

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	0744681	.0159327	-4.67	0.000	1056957	0432405
ereri_cde	0656908	.0162566	-4.04	0.000	0975532	0338285
ereri_intref	.0023859	.0013247	1.80	0.072	0002105	.0049824
ereri_intmed	.0045361	.0011665	3.89	0.000	.0022497	.0068225
ereri_pie	0156992	.0032712	-4.80	0.000	0221107	0092878

```
111 .
112 .
114 . capture drop zpoorsleep 2006
115 . capture drop zpoorsleepalt_2006
116 . capture drop zlnhurd_odds
117 . capture drop zlnexpert odds
118 . capture drop zlnlasso_odds
119 . foreach x of varlist poorsleep_2006 poorsleepalt_2006 lnhurd_odds lnexpert_odds lnlasso_odds {
                mi passive: egen z`x'=std(`x') if sample_final==1
     2.
   (passive variables zpoorsleep_2006 zpoorsleepalt_2006 zlnhurd_odds zlnexpert_odds zlnlasso_odds unregistered beca
   m=0:
   (36,570 missing values generated)
   m=1:
   (36,570 missing values generated)
   m=2:
   (36,570 missing values generated)
   m=3:
   (36,570 missing values generated)
   m=4:
   (36,570 missing values generated)
   m=5:
   (36,570 missing values generated)
   m=0:
   (36,570 missing values generated)
   (36,570 missing values generated)
   m=2:
   (36,570 missing values generated)
   m=3:
   (36,570 missing values generated)
   (36,570 missing values generated)
   m=5:
   (36,570 missing values generated)
   m=0:
   (36,570 missing values generated)
   m=1:
   (36,570 missing values generated)
   (36,570 missing values generated)
   m=3:
   (36,570 missing values generated)
   m=4:
   (36,570 missing values generated)
   m=5:
   (36,570 missing values generated)
   (36,570 missing values generated)
   m=1:
   (36,570 missing values generated)
   m=2:
   (36,570 missing values generated)
   m=3:
   (36,570 missing values generated)
   m=4:
   (36,570 missing values generated)
```

```
(36,570 missing values generated)
             (36,570 missing values generated)
             (36,570 missing values generated)
            m=2:
             (36,570 missing values generated)
             (36,570 missing values generated)
             (36,570 missing values generated)
            (36,570 missing values generated)
121 . save, replace
            (file C:\Users\baydounm\AppData\Local\Temp\ST 6434 000002.tmp not found)
            file C:\Users\baydounm\AppData\Local\Temp\ST_6434_000002.tmp saved as .dta format
122 .
123 .
124 .
125 .
126 . foreach m of varlist zlnhurd odds zlnexpert odds zlnlasso odds {
                  2. mi estimate, cmdok esampvaryok: med4way zpoorsleep_2006 `m' AGE2006 SEX NonWhite educationg* totwealth 2006
            > * zcesd_2006 if SEX==1 , a0(0) a1(1) m(0) yreg(cox) mreg(linear)
            Warning: this analysis assumes a rare outcome.
            Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu
            > 6g1 smoking 2006g2 smoking 2006g3 physic act 2006g1 physic act 2006g2 physic act 2006g3 srh 2006g1 srh 2006g2 l
            > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.
            Warning: this analysis assumes a rare outcome.
            Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educ
            > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l
            > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.
            Warning: this analysis assumes a rare outcome.
            Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu
            > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l
            > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.
            Warning: this analysis assumes a rare outcome.
            Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educ
```

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> ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg3 educationg4 educationg4 educationg5 educationg5 educationg5 educationg5 educationg5 educationg64 educationg64 educationg65 educati

> 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 sedicationg3 sedicationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg5 educationg3 educationg4 educationg5 educationg5 educationg4 educationg5 educationg6 educationg7 educationg6 educationg7 e

```
Multiple-imputation estimates
                                                Imputations
                                                Number of obs
                                                                         2,698
                                                Average RVI
                                                                        0.0001
                                                Largest FMI
                                                                        0.0003
DF adjustment:
                 Large sample
                                                DF:
                                                        min
                                                                      4.11e+07
                                                        avg
                                                                      1.33e+09
                                                                      5.09e+09
                                                        max
```

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	0464783	.0255186	-1.82	0.069	0964939	.0035373
ereri_cde	0509472	.0257284	-1.98	0.048	1013739	0005205
ereri_intref	.0072059	.0030444	2.37	0.018	.001239	.0131728
ereri_intmed	.0017317	.001408	1.23	0.219	0010279	.0044913
ereri_pie	0044688	.0034806	-1.28	0.199	0112906	.0023531

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 londbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 londbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 londbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 sedicationg3 sedicationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg4 educationg5 educationg4 educationg5 educationg5 educationg4 educationg5 educationg6 educationg7 educationg6 educationg6 educationg7 e

Multiple-imputation estimates Imputations Number of obs 2,698 0.0001 Average RVI Largest FMI 0.0005 DF adjustment: Large sample DF: 1.76e+07 min 4.58e+08 avg max 9.82e+08

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	0462402	.0255883	-1.81	0.071	0963924	.003912
ereri cde	0475651	.0257412	-1.85	0.065	0980169	.0028866
ereri intref	.005353	.0025776	2.08	0.038	.0003009	.0104051
ereri intmed	.0021476	.0012907	1.66	0.096	0003821	.0046774
ereri_pie	0061757	.0032259	-1.91	0.056	0124984	.0001469

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 sedicationg3 sedicationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg4 educationg2 educationg3 educationg4 e

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 by ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 by ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg4 educationg2 sedicationg2 sedicationg3 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 by ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Multiple-imputation estimates		Imputations	=	5
		Number of ob	s =	2,698
		Average RVI	=	0.0001
		Largest FMI	=	0.0004
DF adjustment:	Large sample	DF: min	=	2.74e+07
		avg	=	5.31e+08
		max	=	9.60e+08

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri ereri_cde ereri_intref ereri_intmed ereri pie	0482747 0529877 .0105406 .0020366 0078643	.0254657 .0263232 .004262 .001237	-1.90 -2.01 2.47 1.65 -1.98	0.058 0.044 0.013 0.100 0.048	0981865 1045801 .0021873 0003879 0156619	.0016372 0013952 .0188939 .0044612 0000666

127 .

128

129 . *****SENSITIVITY ANALYSIS, MEN******

130 .

131 . foreach m of varlist zlnhurd_odds zlnexpert_odds zlnlasso_odds {

2. mi estimate, cmdok esampvaryok: med4way zpoorsleepalt_2006 `m' AGE2006 SEX NonWhite educationg* totwealth_2 > 06g* zcesd_2006 if SEX==1 , a0(0) a1(1) m(0) yreg(cox) mreg(linear)

3. }

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 by ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 long12006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 long1 srdprovided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 sedicationg3 sedicationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 e

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 sedicationg3 sedicationg3 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 by ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Multiple-imputation estimates		Imputations	=	5
		Number of obs	=	2,698
		Average RVI	=	0.0001
		Largest FMI	=	0.0003
DF adjustment: Larg	Large sample	DF: min	=	3.58e+07
		avg	=	2.02e+09
		max	=	8.49e+09

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	0499218	.0253418	-1.97	0.049	0995909	0002528
ereri_cde	0546463	.0255597	-2.14	0.033	1047423	0045502
ereri_intref	.0074653	.0031169	2.40	0.017	.0013564	.0135743
ereri_intmed	.0018204	.0014413	1.26	0.207	0010045	.0046453
ereri_pie	0045613	.0034561	-1.32	0.187	0113351	.0022125

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 londbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 londbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 londbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 sedicationg3 sedicationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg4 educationg5 educationg4 educationg5 educationg5 educationg4 educationg5 educationg6 educationg7 educationg6 educationg6 educationg7 e

Multiple-imputation estimates **Imputations** Number of obs 2,698 0.0002 Average RVI Largest FMI 0.0005 DF adjustment: Large sample DF: min 1.61e+07 5.51e+08 avg 1.48e+09 max

Coefficient Std. err. P>|t| [95% conf. interval] -1.94 tereri -.049416 .0254347 0.052 -.0992672 .0004351 ereri_cde 0.044 -.0014294 -.0515294 .0255617 -2.02 -.1016295 ereri intref .0055075 .0026007 2.12 0.034 .0004102 .0106048 ereri intmed .0019059 .0012649 1.51 0.132 -.0005733 .0043851

-1.67

.0031745

Warning: this analysis assumes a rare outcome.

-.0053001

ereri pie

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 sedicationg3 sedicationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg4 educationg2 educationg3 educationg4 e

-.011522

.0009218

0.095

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 by ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg4 educationg2 sedicationg2 sedicationg3 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 by ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

```
Imputations
Multiple-imputation estimates
                                                                              5
                                                 Number of obs
                                                                          2,698
                                                 Average RVI
                                                                         0.0001
                                                 Largest FMI
                                                                         0.0004
DF adjustment:
                 Large sample
                                                 DF:
                                                        min
                                                                       2.62e+07
                                                         avg
                                                                       6.86e+08
                                                                       1.58e+09
                                                         max
```

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri ereri_cde ereri_intref ereri_intmed ereri pie	0518629 0572273 .0107801 .001954 0073697	.0253063 .0261577 .0043433 .0012319	-2.05 -2.19 2.48 1.59 -1.87	0.040 0.029 0.013 0.113 0.061	1014623 1084955 .0022674 0004606 0150799	0022636 0059591 .0192927 .0043685 .0003405

```
132 .
133 .
134 .
136 . capture drop zpoorsleep_2006
137 . capture drop zpoorsleepalt_2006
138 . capture drop zlnhurd odds
139 . capture drop zlnexpert_odds
140 . capture drop zlnlasso_odds
141 . foreach x of varlist poorsleep 2006 poorsleepalt 2006 lnhurd odds lnexpert odds lnlasso odds {
     2.
               mi passive: egen z`x'=std(`x') if sample final==1
     3. }
   (passive variables zpoorsleep_2006 zpoorsleepalt_2006 zlnhurd_odds zlnexpert_odds zlnlasso_odds unregistered beca
   (36,570 missing values generated)
   m=1:
   (36,570 missing values generated)
   (36,570 missing values generated)
```

(36,570 missing values generated) m=4: (36,570 missing values generated) m=5: (36,570 missing values generated) (36,570 missing values generated) m=1: (36,570 missing values generated) m=2: (36,570 missing values generated) (36,570 missing values generated)

(36,570 missing values generated)

m=4:

m=3:

```
(36,570 missing values generated)
    m=0:
    (36,570 missing values generated)
   m=1:
    (36,570 missing values generated)
   m=2:
    (36,570 missing values generated)
   m=3:
    (36,570 missing values generated)
    m=4:
    (36,570 missing values generated)
    (36,570 missing values generated)
   m=0:
    (36,570 missing values generated)
    (36,570 missing values generated)
   m=2:
    (36,570 missing values generated)
   m=3:
    (36,570 missing values generated)
   m=4:
    (36,570 missing values generated)
    (36,570 missing values generated)
    m=0:
    (36,570 missing values generated)
   m=1:
    (36,570 missing values generated)
    (36,570 missing values generated)
   m=3:
   (36,570 missing values generated)
   m=4:
   (36,570 missing values generated)
   m=5:
    (36,570 missing values generated)
142 .
143 . save, replace
    (file C:\Users\baydounm\AppData\Local\Temp\ST_6434_000002.tmp not found)
   file C:\Users\baydounm\AppData\Local\Temp\ST_6434_000002.tmp saved as .dta format
144 .
145 .
146 .
147 . save, replace
   file C:\Users\baydounm\AppData\Local\Temp\ST_6434_000002.tmp saved as .dta format
148 .
```

```
149 .
```

150 . foreach m of varlist zlnhurd odds zlnexpert odds zlnlasso odds {

2. mi estimate, cmdok esampvaryok: med4way zpoorsleep_2006 `m' AGE2006 SEX NonWhite educationg* totwealth_2006

> * zcesd_2006 if SEX==2 , a0(0) a1(1) m(0) yreg(cox) mreg(linear)

3. }

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l

> ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 londbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Multiple-imputation estimates		Imputations	=	5
		Number of obs	=	3,812
		Average RVI	=	0.0000
		Largest FMI	=	0.0000
DF adjustment:	Large sample	DF: min	=	1.96e+09
		avg	=	3.83e+09
		max	=	6.85e+09

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	0792418	.0208355	-3.80	0.000	1200786	0384049
ereri_cde	0730487	.0213283	-3.42	0.001	1148515	0312459
ereri_intref	.0037994	.0022261	1.71	0.088	0005636	.0081625
ereri_intmed	.0048881	.0016858	2.90	0.004	.0015839	.0081922
ereri_pie	0148805	.0044637	-3.33	0.001	0236292	0061318

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 sedicationg3 sedicationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 e

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 sedicationg3 sedicationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg4 educationg2 educationg3 educationg4 e

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 by ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg4 educationg2 sedicationg2 sedicationg3 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 by ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Multiple-imputation estimates		Imputations	=	5
		Number of obs	=	3,812
		Average RVI	=	0.0000
		Largest FMI	=	0.0000
DF adjustment:	Large sample	DF: min	=	3.41e+09
		avg	=	5.03e+09
		max	=	6.160+09

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	0822088	.020797	-3.95	0.000	1229701	0414474
ereri_cde	0657938	.0210867	-3.12	0.002	1071229	0244647
ereri_intref	0045413	.0021765	-2.09	0.037	0088072	0002754
ereri_intmed	.0055607	.0017512	3.18	0.001	.0021284	.0089929
ereri_pie	0174343	.0048044	-3.63	0.000	0268507	008018

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 long1 values are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l

> ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l

> ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 long1 srdprovided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Multiple-imputation estimates

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Imputations

DF adjustment:	: Large samp	le		Number Average Largest DF:	RVI	= = =	3,812 0.0000 0.0000 3.83e+09 5.79e+09 9.04e+09
	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
tereri ereri_cde ereri_intref ereri_intmed ereri_pie	0839315 0610073 0080102 .0065684 0214824	.0207153 .0209599 .0023651 .0018497 .0049875	-4.05 -2.91 -3.39 3.55 -4.31	0.000 0.004 0.001 0.000 0.000	124 10 012 .002	2088 6457 9431	0433302 0199267 0033746 .0101937 011707

```
Tuesday December 12 08:01:16 2023 Page 23
151 .
152 .
153 .
154 . *****SENSITIVITY ANALYSIS, WOMEN******
155 .
156 . foreach m of varlist zlnhurd_odds zlnexpert_odds zlnlasso_odds {
      2. mi estimate, cmdok esampvaryok: med4way zpoorsleepalt_2006 `m' AGE2006 SEX NonWhite educationg* totwealth_2
    > 06g* zcesd_2006 if SEX==2 , a0(0) a1(1) m(0) yreg(cox) mreg(linear)
    Warning: this analysis assumes a rare outcome.
    > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.
```

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educ > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l > ndbr 2006g3 zcesd 2006 were not provided. All covariates are fixed at their respective mean.

Multiple-imputation estimates Imputations Number of obs 3,812 0.0000 Average RVI Largest FMI 0.0001 DF adjustment: Large sample 1.05e+09 DF: min 2.35e+09 avg 4.26e+09 max

Coefficient Std. err. P>|t| [95% conf. interval] -4.23 0.000 tereri -.0871932 .0206018 -.1275721 -.0468144 ereri_cde -.0803506 0.000 -.038999 .0210981 -3.81 -.1217022 .0039831 .0021884 1.82 0.069 -.0003061 .0082723

ereri intref ereri intmed .0053083 .0017144 3.10 0.002 .001948 .0086685 ereri pie -.0161339 .0044396 -3.63 0.000 -.0248355 -.0074324

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educ > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educ > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l > ndbr 2006g3 zcesd 2006 were not provided. All covariates are fixed at their respective mean.

Multiple-imput	Multiple-imputation estimates				ions	=	5
				Number	of obs	=	3,812
				Average	RVI	=	0.0000
				Largest	FMI	=	0.0001
DF adjustment: Large sample				DF:	min	=	1.18e+09
					avg	=	3.05e+09
					max	=	5.14e+09
	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
tereri	0896944	.0205713	-4.36	0.000	1300	134	0493755
ereri_cde	0733173	.0208685	-3.51	0.000	1142	2188	0324158
ereri_intref	0041846	.0021176	-1.98	0.048	0083	3349	0000343
ereri_intmed	.0056334	.0017336	3.25	0.001	.0022	2355	.0090312
ereri_pie	0178259	.0047459	-3.76	0.000	027	L278	0085241

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu > 6g1 smoking 2006g2 smoking 2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l

> ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l

> ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l > ndbr 2006g3 zcesd 2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Multiple-imputation estimates

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Imputations

DF adjustment:	: Large samp	le		Number Average Largest DF:	RVI	= = =	3,812 0.0000 0.0001 1.27e+09 3.43e+09 5.68e+09
	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
tereri ereri_cde ereri_intref ereri_intmed ereri_pie	0918031 0685525 0076524 .0068409 0224391	.0204745 .0207379 .0023243 .0018637 .0049456	-4.48 -3.31 -3.29 3.67 -4.54	0.000 0.001 0.001 0.000 0.000	1319 1093 013 0323	1981 2208 1881	0516738 0279069 0030968 .0104938 0127459

```
157 .
158 .
159 .
161 . capture drop zpoorsleep_2006
162 . capture drop zpoorsleepalt_2006
163 . capture drop zlnhurd odds
164 . capture drop zlnexpert_odds
165 . capture drop zlnlasso_odds
166 . foreach x of varlist poorsleep_2006 poorsleepalt_2006 lnhurd_odds lnexpert_odds lnlasso_odds {
                mi passive: egen z`x'=std(`x') if sample_final==1
      2.
     3. }
    (passive variables zpoorsleep_2006 zpoorsleepalt_2006 zlnhurd_odds zlnexpert_odds zlnlasso_odds unregistered beca
    (36,570 missing values generated)
   m=1:
    (36,570 missing values generated)
   m=2:
    (36,570 missing values generated)
   m=3:
    (36,570 missing values generated)
    m=4:
    (36,570 missing values generated)
   m=5:
    (36,570 missing values generated)
    (36,570 missing values generated)
   m=1:
    (36,570 missing values generated)
    m=2:
    (36,570 missing values generated)
   m=3:
    (36,570 missing values generated)
    (36,570 missing values generated)
    m=5:
    (36,570 missing values generated)
    (36,570 missing values generated)
    m=1:
    (36,570 missing values generated)
    (36,570 missing values generated)
    m=3:
    (36,570 missing values generated)
    m=4:
    (36,570 missing values generated)
   m=5:
    (36,570 missing values generated)
   m=0:
    (36,570 missing values generated)
    m=1:
    (36,570 missing values generated)
   m=2:
    (36,570 missing values generated)
    (36,570 missing values generated)
    m=4:
```

```
(36,570 missing values generated)
    (36,570 missing values generated)
167 .
168 . save, replace
    (file C:\Users\baydounm\AppData\Local\Temp\ST_6434_000002.tmp not found)
    file C:\Users\baydounm\AppData\Local\Temp\ST_6434_000002.tmp saved as .dta format
169 .
170 .
171 .
172 .
173 .
174 . foreach m of varlist zlnhurd_odds zlnexpert_odds zlnlasso_odds {
      2. mi estimate, cmdok esampvaryok: med4way zpoorsleep_2006 `m' AGE2006 SEX NonWhite educationg* totwealth_2006
    > * zcesd_2006 if NonWhite==0 , a0(0) a1(1) m(0) yreg(cox) mreg(linear)
    Warning: this analysis assumes a rare outcome.
    Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu
    > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l
    > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.
    Warning: this analysis assumes a rare outcome.
    Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu
    > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l
    > ndbr 2006g3 zcesd 2006 were not provided. All covariates are fixed at their respective mean.
    Warning: this analysis assumes a rare outcome.
    Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu
    > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l
    > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.
    Warning: this analysis assumes a rare outcome.
    Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu
    > 6g1 smoking 2006g2 smoking 2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l
    > ndbr 2006g3 zcesd 2006 were not provided. All covariates are fixed at their respective mean.
```

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l

```
Multiple-imputation estimates
                                               Imputations
                                               Number of obs
                                                                        5,324
                                               Average RVI
                                                                       0.0000
                                               Largest FMI
                                                                       0.0001
DF adjustment:
               Large sample
                                               DF:
                                                       min
                                                                     1.18e+09
                                                                     2.64e+09
                                                       avg
                                                       max
                                                                     5.80e+09
```

> ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

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	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	0494798	.017994	-2.75	0.006	0847474	0142121
ereri_cde	0549282	.0185605	-2.96	0.003	0913061	0185502
ereri_intref	.0133072	.0030837	4.32	0.000	.0072634	.0193511
ereri_intmed	.0041126	.0013211	3.11	0.002	.0015232	.006702
ereri_pie	0119715	.0033883	-3.53	0.000	0186123	0053306

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 londbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 sedicationg3 sedicationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg4 educationg5 educationg4 educationg5 educationg5 educationg4 educationg5 educationg6 educationg7 educationg6 educationg6 educationg7 e

Multiple-imputation estimates Imputations Number of obs 5,324 Average RVI 0.0000 Largest FMI 0.0001 DF adjustment: Large sample 1.19e+09 DF: min 2.01e+09 avg 3.98e+09 max

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	0511674	.0179926	-2.84	0.004	0864323	0159025
ereri_cde	0456814	.018472	-2.47	0.013	0818859	0094769
ereri_intref	.0063426	.0019961	3.18	0.001	.0024304	.0102549
ereri_intmed	.0051486	.0013631	3.78	0.000	.0024769	.0078203
ereri_pie	0169772	.0036564	-4.64	0.000	0241436	0098108

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 londbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 by ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg4 educationg2 sedicationg2 sedicationg3 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 by ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Multiple-imputation estimates		Imputations	=	5
		Number of obs	=	5,324
		Average RVI	=	0.0000
		Largest FMI	=	0.0001
DF adjustment:	Large sample	DF: min	=	5.08e+08
		avg	=	4.59e+09
		max	=	1.68e+10

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri ereri_cde ereri_intref ereri_intmed ereri pie	0523651 0469564 .0078081 .0056646 0188813	.0179126 .0185279 .0022414 .0014337	-2.92 -2.53 3.48 3.95 -4.91	0.003 0.011 0.000 0.000	0874732 0832704 .0034149 .0028546 0264123	0172569 0106425 .0122012 .0084746 0113503

```
175 .
```

176 .

177

178 . *****SENSITIVITY ANALYSIS, NHW******

179

180 . foreach m of varlist zlnhurd_odds zlnexpert_odds zlnlasso_odds {

2. mi estimate, cmdok esampvaryok: med4way zpoorsleepalt_2006 `m' AGE2006 SEX NonWhite educationg* totwealth_2 > 06g* zcesd_2006 if NonWhite==0 , a0(0) a1(1) m(0) yreg(cox) mreg(linear)

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 sedicationg3 sedicationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg5 educationg3 educationg4 educationg5 educationg5 educationg4 educationg5 educationg6 educationg7 educationg6 educationg7 e

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 sedicationg3 sedicationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg4 educationg5 educationg4 educationg5 educationg5 educationg4 educationg5 educationg6 educationg7 educationg6 educationg6 educationg7 e

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 sedicationg3 sedicationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg5 educationg3 educationg4 educationg5 educationg5 educationg4 educationg5 educationg6 educationg7 educationg6 educationg7 e

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Multiple-imputa	tion estimates	Imputations	=	5
		Number of obs	=	5,324
		Average RVI	=	0.0000
		Largest FMI	=	0.0001
DF adjustment:	Large sample	DF: min	=	1.58e+09
		avg	=	5.83e+09
		max	=	1.21e+10

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	0563906	.017887	-3.15	0.002	0914485	0213328
ereri_cde	061824	.0184703	-3.35	0.001	0980252	0256229
ereri_intref	.013754	.0031299	4.39	0.000	.0076194	.0198885
ereri_intmed	.0045156	.0013674	3.30	0.001	.0018356	.0071956
ereri_pie	0128361	.0033782	-3.80	0.000	0194573	006215

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 londbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 sedicationg3 sedicationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg4 educationg5 educationg4 educationg5 educationg5 educationg4 educationg5 educationg6 educationg7 educationg6 educationg6 educationg7 e

Multiple-imputation estimates Imputations Number of obs 5,324 Average RVI 0.0000 Largest FMI 0.0001 DF adjustment: Large sample 1.41e+09 DF: min 5.11e+09 avg 1.02e+10 max

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	0578032	.0178991	-3.23	0.001	0928849	0227215
ereri_cde	0527225	.0183726	-2.87	0.004	0887322	0167129
ereri_intref	.0065844	.0020024	3.29	0.001	.0026598	.010509
ereri_intmed	.0051515	.001365	3.77	0.000	.0024762	.0078268
ereri_pie	0168165	.0036252	-4.64	0.000	0239217	0097113

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 londbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg5 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 by ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg4 educationg2 sedicationg2 sedicationg3 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 by ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

```
Multiple-imputation estimates
                                                Imputations
                                                                              5
                                                Number of obs
                                                                         5,324
                                                Average RVI
                                                                         0.0000
                                                Largest FMI
                                                                         0.0001
DF adjustment:
                Large sample
                                                DF:
                                                        min
                                                                       5.87e+08
                                                        avg
                                                                       7.52e+09
                                                        max
                                                                      1.31e+10
```

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	0593195	.0178148	-3.33	0.001	0942359	0244032
ereri_cde	0541993	.018439	-2.94	0.003	090339	0180596
ereri_intref	.0081853	.0022739	3.60	0.000	.0037285	.0126421
ereri_intmed	.0058666	.0014602	4.02	0.000	.0030046	.0087285
ereri_pie	0191721	.003814	-5.03	0.000	0266473	0116969

```
183 . capture drop zpoorsleep_2006
184 . capture drop zpoorsleepalt_2006
185 . capture drop zlnhurd_odds
186 . capture drop zlnexpert odds
187 . capture drop zlnlasso_odds
188 . foreach x of varlist poorsleep_2006 poorsleepalt_2006 lnhurd_odds lnexpert_odds lnlasso_odds {
     2.
              mi passive: egen z`x'=std(`x') if sample_final==1
     3. }
   (passive variables zpoorsleep_2006 zpoorsleepalt_2006 zlnhurd_odds zlnexpert_odds zlnlasso_odds unregistered beca
   (36,570 missing values generated)
   m=1:
   (36,570 missing values generated)
   m=2:
   (36,570 missing values generated)
```

(36,570 missing values generated) m=4:

(36,570 missing values generated) m=5:

(36,570 missing values generated) m=0:

(36,570 missing values generated)

(36,570 missing values generated)

m=2: (36,570 missing values generated)

m=3: (36,570 missing values generated)

(36,570 missing values generated) m=5:

(36,570 missing values generated)

```
Tuesday December 12 08:01:18 2023 Page 31
```

(36,570 missing values generated)

(36,570 missing values generated)

m=1:

```
(36,570 missing values generated)
    m=3:
    (36,570 missing values generated)
    m=3:
    (36,570 missing values generated)
    m=4:
    (36,570 missing values generated)
    m=5:
    (36,570 missing values generated)
    (36,570 missing values generated)
    m=1:
    (36,570 missing values generated)
    m=2:
    (36,570 missing values generated)
    (36,570 missing values generated)
    m=4:
    (36,570 missing values generated)
    m=5:
    (36,570 missing values generated)
189 .
190 . save, replace
    (file C:\Users\baydounm\AppData\Local\Temp\ST_6434_000002.tmp not found)
    file C:\Users\baydounm\AppData\Local\Temp\ST_6434_000002.tmp saved as .dta format
191 .
192 .
193 .
194 .
195 . foreach m of varlist zlnhurd odds zlnexpert odds zlnlasso odds {
      2. mi estimate, cmdok esampvaryok: med4way zpoorsleep_2006 `m' AGE2006 SEX NonWhite educationg* totwealth_2006
    > * zcesd_2006 if NonWhite==1 , a0(0) a1(1) m(0) yreg(cox) mreg(linear)
      3. }
    Warning: this analysis assumes a rare outcome.
    Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4
    > 6g1 smoking 2006g2 smoking 2006g3 physic act 2006g1 physic act 2006g2 physic act 2006g3 srh 2006g1 srh 2006g2 l
    > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.
    Warning: this analysis assumes a rare outcome.
    Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu
    > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l
    > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.
    Warning: this analysis assumes a rare outcome.
    Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4
    > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l
    > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.
    Warning: this analysis assumes a rare outcome.
```

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 londbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 by ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Multiple-imputation estimates		Imputations	=	5
		Number of obs	=	1,186
		Average RVI	=	0.0003
		Largest FMI	=	0.0011
DF adjustment:	Large sample	DF: min	=	3355538.16
		avg	=	5.84e+09
		max	=	2.53e+10

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	1308157	.0374302	-3.49	0.000	2041776	0574537
ereri_cde	1105529	.0378512	-2.92	0.003	1847398	0363659
ereri_intref	0161959	.0105063	-1.54	0.123	036788	.0043961
ereri_intmed	.0014922	.0017496	0.85	0.394	0019369	.0049213
ereri_pie	0055591	.0057113	-0.97	0.330	016753	.0056349

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 long2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 sedicationg3 sedicationg3 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 by ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Multiple-imputat	ion estimates	Imputat:	ions	=	5
		Number o	of obs	=	1,186
		Average	RVI	=	0.0007
		Largest	FMI	=	0.0025
DF adjustment:	Large sample	DF:	min	=	651,141.36
			avg	=	1.51e+11
			max	=	7.51e+11

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	1300898	.0374226	-3.48	0.001	2034369	0567428
ereri_cde	1191736	.0377776	-3.15	0.002	1932162	0451309
ereri_intref	0101299	.0086784	-1.17	0.243	0271393	.0068795
ereri_intmed	.0002406	.001162	0.21	0.836	0020369	.0025181
ereri_pie	0010269	.0049001	-0.21	0.834	0106309	.0085771

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 londbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 londbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.
Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educa

> 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l
> ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Multiple-imputation estimates **Imputations** Number of obs 1,186 Average RVI 0.0003 Largest FMI 0.0009 DF adjustment: = 4673663.36 Large sample DF: min 3.07e+10 avg 1.49e+11 max

Coefficient Std. err. P>|t| [95% conf. interval] tereri -.1338002 .0373552 -3.58 0.000 -.207015 -.0605854 ereri_cde 0.001 -.1238971 .0367782 -3.37 -.195981 -.0518131 ereri intref -.0058766 .0086654 -0.68 0.498 -.0228605 .0111073 ereri intmed .0005926 .0010317 0.57 0.566 -.0014295 .0026146 ereri pie -.0046191 .0062616 -0.74 0.461 -.0168917 .0076535

196 .

197 . *****SENSITIVITY ANALYSIS, Non-White******

198 .

199 . foreach m of varlist zlnhurd_odds zlnexpert_odds zlnlasso_odds {
2. mi estimate, cmdok esampvaryok: med4way zpoorsleepalt 2006 `m' AGE2006 SEX NonWhite educationg* totwealth 2

> 06g* zcesd_2006 if NonWhite==1 , a0(0) a1(1) m(0) yreg(cox) mreg(linear)

3. }

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 londbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 longraphysic_act_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

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Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 sedicationg3 sedicationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 educationg4 educationg4 educationg5 educationg4 educationg5 educationg5 educationg4 educationg5 educationg6 educationg7 educationg6 educationg6 educationg7 e

Multiple-imputation estimates Imputations Number of obs 1,186 Average RVI 0.0003 Largest FMI 0.0012 DF adjustment: Large sample = 3027996.90 min 4.61e+09 avg 1.98e+10 max

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	1310776	.0365923	-3.58	0.000	2027973	0593579
ereri cde	1111045	.0371344	-2.99	0.003	1838865	0383225
ereri_intref	015845	.0103624	-1.53	0.126	036155	.004465
ereri intmed	.0014531	.0016788	0.87	0.387	0018373	.0047435
ereri pie	0055812	.0056183	-0.99	0.321	0165929	.0054305

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 sedicationg2 educationg3 educationg4 educationg2 sedicationg3 educationg4 educationg2 educationg3 educationg3 educationg4 educationg4 educationg2 educationg3 educationg3 educationg4 educationg4 educationg2 educationg3 educationg4 ed

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Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 by ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 by ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 by ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

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Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educationg4 educationg2 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 by ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Multiple-imputat	ion estimates	Imputations	=	5
		Number of obs	=	1,186
		Average RVI	=	0.0006
		Largest FMI	=	0.0026
DF adjustment:	Large sample	DF: min	=	593,379.03
		avg	=	5.37e+10
		max	=	2.60e+11

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	1305678	.036569	-3.57	0.000	2022418	0588939
ereri_cde	1197367	.0370739	-3.23	0.001	1924002	0470732
ereri_intref	0103081	.0085493	-1.21	0.228	0270644	.0064482
ereri_intmed	.0001613	.0011436	0.14	0.888	0020801	.0024027
ereri_pie	0006843	.0048254	-0.14	0.887	0101419	.0087732

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 educ > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu > 6g1 smoking 2006g2 smoking 2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite educationg1 educationg2 educationg3 educationg4 edu > 6g1 smoking_2006g2 smoking_2006g3 physic_act_2006g1 physic_act_2006g2 physic_act_2006g3 srh_2006g1 srh_2006g2 l > ndbr_2006g3 zcesd_2006 were not provided. All covariates are fixed at their respective mean.

Multiple-imputation estimates		Imputations		5
	Number o	of obs	=	1,186
	Average	RVI	=	0.0003
	Largest	FMI	=	0.0010
Large sample	DF:	min	=	4317459.70
		avg	=	1.88e+10
		max	=	9.04e+10
	ion estimates Large sample	Number o Average Largest	Number of obs Average RVI Largest FMI DF: min avg	Number of obs = Average RVI = Largest FMI = DF: min = avg =

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	134643	.0364571	-3.69	0.000	2060977	0631884
ereri_cde	1245663	.036056	-3.45	0.001	1952349	0538978
ereri_intref	005761	.0085282	-0.68	0.499	022476	.0109539
ereri_intmed	.0006235	.0010289	0.61	0.544	0013931	.0026402
ereri_pie	0049392	.0061316	-0.81	0.421	016957	.0070786

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200 .

201 .202 . save finaldata_imputed_FINAL, replace file finaldata_imputed_FINAL.dta saved

203 . 204 . 205 . 206 .

207 . capture log close