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

```
1 .
3 . **STEP 17: TABLE S3: MED4WAY FOR POOR SLEEP AS EXPOSURE, DIFFERENT PROBABILITIES OF DEMENTIA AS MEDIATORS, AND
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))
   (passive variable lnhurd_odds unregistered because not in m=0)
   m=0:
   (35,952 missing values generated)
   m=1:
   (35,952 missing values generated)
   m=2:
   (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))
   (passive variable lnexpert_odds unregistered because not in m=0)
   m=0:
   (35,850 missing values generated)
   m=1:
   (35,850 missing values generated)
   m=2:
   (35,850 missing values generated)
   (35,850 missing values generated)
   m=4:
   (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))
   (passive variable lnlasso_odds unregistered because not in m=0)
   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:
   (36,394 missing values generated)
20 .
21 .
22 . capture drop Men
23 . mi passive: gen Men=1 if SEX==1 & sample_final==1
   (passive variable Men unregistered because not in m=0)
   m=0:
   (40,630 missing values generated)
   m=1:
   (40,630 missing values generated)
   m=2:
   (40,630 missing values generated)
   m=3:
   (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
   m=0:
   (4,060 real changes made)
   m=1:
   (4,060 real changes made)
   (4,060 real changes made)
   m=3:
   (4,060 real changes made)
   m=4:
   (4,060 real changes made)
   (4,060 real changes made)
25 .
26 . capture drop Women
```

```
27 . mi passive: gen Women=1 if SEX==2 & sample_final==1
   (passive variable Women unregistered because not in m=0)
   m=0:
   (39,501 missing values generated)
  m=1:
   (39,501 missing values generated)
  m=2:
   (39,501 missing values generated)
  m=3:
   (39,501 missing values generated)
   m=4:
   (39,501 missing values generated)
  m=5:
  (39,501 missing values generated)
28 . mi passive: replace Women=0 if Women~=1 & SEX~=. & sample_final==1
   (2,931 real changes made)
  m=1:
  (2,931 real changes made)
  m=2:
  (2,931 real changes made)
  m=3:
  (2,931 real changes made)
  (2,931 real changes made)
  m=5:
  (2,931 real changes made)
30 . capture drop NHW
31 . mi passive: gen NHW=1 if RACE_ETHN==1 & sample_final==1
   (passive variable NHW unregistered because not in m=0)
  m=0:
   (37,895 missing values generated)
  m=1:
   (37,895 missing values generated)
   (37,895 missing values generated)
   (37,895 missing values generated)
  m=4:
   (37,895 missing values generated)
   (37,895 missing values generated)
32 . mi passive: replace NHW=0 if NHW~=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)
   (1,325 real changes made)
  m=4:
  (1,325 real changes made)
   (1,325 real changes made)
```

```
34 . capture drop NHB
35 . mi passive: gen NHB=1 if RACE_ETHN==2 & sample_final==1
   (passive variable NHB unregistered because not in m=0)
   (42,705 missing values generated)
   m=1:
   (42,705 missing values generated)
   m=2:
   (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
   (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)
   m=5:
   (6,135 real changes made)
37 .
38 .
39 . capture drop HISP
40 . mi passive: gen HISP=1 if RACE ETHN==3 & sample final==1
   (passive variable HISP unregistered because not in m=0)
   (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)
   (43,092 missing values generated)
   m=5:
   (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)
   (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
   (passive variable OTHER unregistered because not in m=0)
   m=0:
   (43,561 missing values generated)
   m=1:
   (43,561 missing values generated)
   (43,561 missing values generated)
   m=3:
   (43,561 missing values generated)
   m=4:
   (43,561 missing values generated)
   (43,561 missing values generated)
46 . mi passive: replace OTHER=0 if OTHER~=1 & RACE_ETHN~=. & sample_final==1
   m=0:
   (6,991 real changes made)
   m=1:
   (6,991 real changes made)
   (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)
   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)
   m=4:
   (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
   (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)
   (1,325 real changes made)
   m=5:
   (1,325 real changes made)
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)

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

64

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)

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

69 . tab srh_2006, generate(srh_2006g)

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

70 .

71 . tab bmibr_2006, generate(bmibr_2006g)

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

72 .

73 . tab cardiometcondbr_2006, generate(cardiometcondbr_2006g)

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

74 .

77 . capture drop zpoorsleep_2006

78 . capture drop zpoorsleepalt 2006

79 . capture drop zlnhurd_odds

80 . capture drop zlnexpert_odds

81 . capture drop zlnlasso_odds

82 . 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 (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)

(36,570 missing values generated)

m=3:

(36,570 missing values generated)

(36,570 missing values generated)

(36,570 missing values generated)

m=0:

84 . 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

(36,570 missing values generated)

(36,570 missing values generated)

83 .

85 .

D

87 . foreach m of varlist zlnhurd_odds zlnexpert_odds zlnlasso_odds {

2. mi estimate, cmdok esampvaryok: med4way zpoorsleep 2006 `m' AGE2006 SEX NonWhite if sample final==1 , a0(0)

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

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Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Multiple-imputation estimates	Imputations	=	5
	Number of obs	=	6,991
	Average RVI	=	0.0000
	Largest FMI	=	0.0000
OF adjustment: Large sample	<u>DF</u> : min	=	•
	avg	=	•
	max	=	

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	.0413436	.0154073 .0146345	2.68 2.59	0.007 0.010	.0111458	.0715414
ereri_cde ereri_intref	0006892	.0028962	-0.24	0.812	0063655	.0049872
ereri_intmed ereri_pie	.000036 .0040611	.0001695 .0034271	0.21 1.18	0.832 0.236	0002962 0026559	.0003682 .0107781

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

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Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Multiple-imputa	tion estimates	Imputations	=	5
		Number of obs	=	6,991
		Average RVI	=	0.0000
		Largest FMI	=	0.0000
DF adjustment:	Large sample	<u>DF</u> : min	=	•
		avg	=	•
		max	=	

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	.0327432	.0154999	2.11	0.035	.002364	.0631224
ereri_cde	.0309697	.0142562	2.17	0.030	.0030281	.0589114
ereri_intref	0136112	.0041018	-3.32	0.001	0216506	0055719
ereri_intmed	0015921	.0007322	-2.17	0.030	0030272	0001569
ereri_pie	.0169768	.004838	3.51	0.000	.0074945	.0264591

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Multiple-imputation estimates		Imputations	=	5
		Number of obs	=	6,991
		Average RVI	=	0.0000
		Largest FMI	=	0.0000
DF adjustment:	Large sample	<u>DF</u> : min	=	•
		avg	=	
		max	=	

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	.0324056	.0154411	2.10	0.036	.0021416	.0626696
ereri_cde	.036473	.0142518	2.56	0.010	.0085399	.064406
ereri_intref	0112649	.0040438	-2.79	0.005	0191907	0033391
ereri_intmed	0005823	.0004417	-1.32	0.187	001448	.0002834
ereri_pie	.0077798	.0046695	1.67	0.096	0013722	.0169319

```
88 .
```

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the Warning: this analysis assumes a rare outcome.

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Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the:

Warning: this analysis assumes a rare outcome.
Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the Warning: this analysis assumes a rare outcome.

<sup>89 .
90 . *****</sup>SENSITIVITY ANALYSIS, OVERALL*******

^{91 .}

^{92 .} foreach m of varlist zlnhurd_odds zlnexpert_odds zlnlasso_odds {

^{2.} mi estimate, cmdok esampvaryok: med4way zpoorsleepalt_2006 `m' AGE2006 SEX NonWhite if sample_final==1 , a0(
3. }

Multiple-imputat	ion estimates	Imputations	=	5
		Number of obs	=	6,991
		Average RVI	=	0.0000
		Largest FMI	=	0.0000
DF adjustment:	Large sample	<u>DF</u> : min	=	•
		avg	=	

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri ereri_cde ereri_intref ereri_intmed ereri_pie	.0309024	.0152712	2.02	0.043	.0009713	.0608334
	.0302486	.0145375	2.08	0.037	.0017557	.0587416
	0009163	.002958	-0.31	0.757	006714	.0048814
	3.25e-06	.000066	0.05	0.961	0001261	.0001326
	.0015668	.003409	0.46	0.646	0051147	.0082482

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

max

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

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Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

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Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

max

Multiple-imputa	tion estimates	Imputations	=	5
		Number of obs	=	6,991
		Average RVI	=	0.0000
		Largest FMI	=	0.0000
DF adjustment:	Large sample	<u>DF</u> : min	=	
		avg	=	

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	.0223145	.0153304	1.46	0.146	0077326	.0523616
ereri_cde	.0233194	.0141721	1.65	0.100	0044575	.0510962
ereri intref	0148883	.0040651	-3.66	0.000	0228558	0069208
ereri_intmed	001674	.0007357	-2.28	0.023	0031159	0002321
ereri pie	.0155575		3.23	0.001	.006116	.024999

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

m=3:

m=4:

m=5:

m=1:

(36,570 missing values generated)

```
Multiple-imputation estimates
                                                  Imputations
                                                                              5
                                                  Number of obs
                                                                          6,991
                                                  Average RVI
                                                                    =
                                                                         0.0000
                                                  Largest FMI
                                                                   =
                                                                         0.0000
   DF adjustment:
                    Large sample
                                                  DF:
                                                          min
                                                                    =
                                                          avg
                                                                    =
                                                          max
                  Coefficient Std. err.
                                                  P>|t|
                                                            [95% conf. interval]
                               .0152773
                    .0217335
                                           1.42
                                                  0.155
                                                           -.0082095
                                                                        .0516764
         tereri
      ereri_cde
                    .0290006
                                           2.05
                                                  0.041
                                                            .0012367
                               .0141655
                                                                        .0567644
   ereri_intref
                   -.0124479
                               .0040104
                                          -3.10
                                                  0.002
                                                           -.0203082
                                                                       -.0045876
   ereri_intmed
                   -.0005014
                               .0004548
                                          -1.10
                                                  0.270
                                                           -.0013927
                                                                        .0003899
                    .0056822
                                                                        .0147844
      ereri_pie
                               .0046441
                                           1.22
                                                  0.221
                                                           -.0034201
93 .
94 .
96 . capture drop zpoorsleep_2006
97 . capture drop zpoorsleepalt 2006
98 . capture drop zlnhurd_odds
99 . capture drop zlnexpert_odds
100 . capture drop zlnlasso odds
101 . 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)
   (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)
```

```
Tuesday December 12 08:01:42 2023 Page 14
    (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)
    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)
102 .
103 . 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
104 .
105 .
```

2. mi estimate, cmdok esampvaryok: med4way zpoorsleep_2006 `m' AGE2006 SEX NonWhite if SEX==1 , a0(0) a1(1) m(0

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

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Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

file C:\Users\baydounm\AppData\Local\Temp\ST_6434_000002.tmp saved as .dta format

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

Warning: this analysis assumes a rare outcome.

106 .

108 . 109 .

107 . save, replace

Multiple-imputa	tion estimates	Imputations	=	5
		Number of obs	=	2,931
		Average RVI	=	0.0000
		Largest FMI	=	0.0000
DF adjustment:	Large sample	<u>DF</u> : min	=	
		avg	=	

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri ereri_cde ereri_intref ereri_intmed ereri pie	.041739 .0418177 0124901 0022556 .0146671	.023752 .0226771 .0038647 .001283 .006248	1.76 1.84 -3.23 -1.76 2.35	0.079 0.065 0.001 0.079 0.019	0048141 0026286 0200646 0047702 .0024213	.0882922 .0862639 0049155 .000259

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

max

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

max

Multiple-imputat	cion estimates	Imputations	=	5
		Number of obs	=	2,931
		Average RVI	=	0.0000
		Largest FMI	=	0.0000
DF adjustment:	Large sample	<u>DF</u> : min	=	•
		avg	=	•

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	.0468487	.0240751	1.95	0.052	0003375	.0940349
ereri cde	.0315026	.022614	1.39	0.164	0128201	.0758253
ereri intref	0072127	.0046229	-1.56	0.119	0162734	.0018481
ereri intmed	0017042	.001527	-1.12	0.264	004697	.0012886

3.53

.0068658

Warning: this analysis assumes a rare outcome.

.0242629

ereri pie

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

.0108061

.0377197

0.000

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	.0459227	.0239378	1.92	0.055	0009945	.09284
ereri_cde	.0358216	.0227731	1.57	0.116	0088129	.0804561
ereri_intref	0074135	.0034671	-2.14	0.032	0142089	0006181
ereri_intmed	0016515	.0012525	-1.32	0.187	0041063	.0008033
ereri_pie	.0191662	.0069093	2.77	0.006	.0056243	.0327081

111 .

112 .

113 . *****SENSITIVITY ANALYSIS, MEN******

114 .

115 . foreach m of varlist zlnhurd_odds zlnexpert_odds zlnlasso_odds {

2. mi estimate, cmdok esampvaryok: med4way zpoorsleepalt_2006 `m' AGE2006 SEX NonWhite if SEX==1 , a0(0) a1(1) 3. }

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	.0363938	.0237137	1.53	0.125	0100842	.0828717
ereri_cde	.0385498	.0226957	1.70	0.089	005933	.0830326
ereri_intref	0126092	.0038722	-3.26	0.001	0201986	0050198
ereri_intmed	002007	.0012411	-1.62	0.106	0044395	.0004255
ereri_pie	.0124602	.0061561	2.02	0.043	.0003943	.024526

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Multiple-imputation estimates Imputations 2,931 Number of obs = Average RVI = 0.0000 Largest FMI 0.0000 = DF adjustment: Large sample DF: min = . avg max

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	.0415679	.0239992	1.73	0.083	0054697	.0886054
ereri_cde	.0266189	.0225919	1.18	0.239	0176605	.0708983
ereri_intref	0079929	.004602	-1.74	0.082	0170127	.001027
ereri_intmed	0020728	.0015948	-1.30	0.194	0051986	.001053
ereri_pie	.0250146	.0068767	3.64	0.000	.0115365	.0384927

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Multiple-imputation estimates		Imputations	=	5
		Number of obs	=	2,931
		Average RVI	=	0.0000
		Largest FMI	=	0.0000
DF adjustment:	Large sample	<u>DF</u> : min	=	•

<u>DF</u>: avg max

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	.040998	.0238926	1.72	0.086	0058307	.0878267
ereri_cde	.0313463	.0227546	1.38	0.168	013252	.0759446
ereri_intref	0074983	.003495	-2.15	0.032	0143484	0006483
ereri_intmed	0017166	.0012603	-1.36	0.173	0041868	.0007537
ereri_pie	.0188666	.0068946	2.74	0.006	.0053535	.0323798

116 .

117 .

118 .

(36,570 missing values generated)

m=5:

m=0:

m=1:

m=2:

m=3:

m=0:

```
Tuesday December 12 08:01:43 2023 Page 19
    (36,570 missing values generated)
    (36,570 missing values generated)
    (36,570 missing values generated)
    (36,570 missing values generated)
    m=4:
    (36,570 missing values generated)
    (36,570 missing values generated)
126 .
127 . 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
128 .
129 .
130 .
131 . foreach m of varlist zlnhurd_odds zlnexpert_odds zlnlasso_odds {
      2. mi estimate, cmdok esampvaryok: med4way zpoorsleep_2006 `m' AGE2006 SEX NonWhite if SEX==2 , a0(0) a1(1) m(0
      3. }
    Warning: this analysis assumes a rare outcome.
    Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the
    Warning: this analysis assumes a rare outcome.
    Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the
    Warning: this analysis assumes a rare outcome.
    Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the
    Warning: this analysis assumes a rare outcome.
    Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the
    Warning: this analysis assumes a rare outcome.
    Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the
```

Multiple-imputation estimates		Imputations	=	5
		Number of obs	=	4,060
		Average RVI	=	0.0000
		Largest FMI	=	0.0000
DF adjustment: Large sample		<u>DF</u> : min	=	•
		avg	=	•
		max	=	

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri ereri_cde ereri_intref ereri_intmed ereri_pie	.0351552 .0302883 .0040149 .0000474	.0202557 .0189386 .0046891 .0002736 .0045856	1.74 1.60 0.86 0.17 0.18	0.083 0.110 0.392 0.862 0.861	0045453 0068308 0051755 0004888 008183	.0748556 .0674073 .0132053 .0005836 .0097922

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Multiple-imputation estimates Imputations 5 Number of obs 4,060 Average RVI 0.0000 0.0000 Largest FMI = DF adjustment: Large sample <u>DF</u>: min avg

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri ereri_cde ereri_intref ereri_intmed	.0230328 .0291695 0186779 0014674	.020302 .0183238 .0063578 .0009128	1.13 1.59 -2.94 -1.61	0.257 0.111 0.003 0.108	0167584 0067444 0311389 0032564	.062824 .0650833 0062169 .0003216
ereri_pie	.0140086	.0067756	2.07	0.039	.0007286	.0272886

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

max

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Multiple-imputation estimates Imputations 5 Number of obs 4,060 Average RVI 0.0000 Largest FMI 0.0000 DF adjustment: Large sample DF: min

avg = max

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	.0233512	.0202816	1.15	0.250	0164001	.0631025
ereri_cde	.0348622	.0181999	1.92	0.055	0008089	.0705334
ereri_intref	0133611	.0069685	-1.92	0.055	0270192	.0002969
ereri_intmed	0001329	.0004406	-0.30	0.763	0009965	.0007306
ereri_pie	.001983	.0064427	0.31	0.758	0106444	.0146105

132 .

133 .

134 .

135 . *****SENSITIVITY ANALYSIS, WOMEN******

136 .

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

2. mi estimate, cmdok esampvaryok: med4way zpoorsleepalt 2006 `m' AGE2006 SEX NonWhite if SEX==2 , a0(0) a1(1) 3. }

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Multiple-imputation estimates		Imputations	=	5
		Number of obs	=	4,060
		Average RVI	=	0.0000
		Largest FMI	=	0.0000
DF adjustment:	Large sample	<u>DF</u> : min	=	
		avg	=	
		max	=	

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri ereri_cde ereri_intref ereri_intmed ereri_pie	.0212436	.0199599	1.06	0.287	0178771	.0603643
	.0200739	.0187163	1.07	0.283	0166095	.0567573
	.0036149	.0047921	0.75	0.451	0057774	.0130073
	0001155	.0002588	-0.45	0.655	0006228	.0003917
	0023297	.0045684	-0.51	0.610	0112835	.0066242

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Multiple-imputation estimates		Imputations	=	5
		Number of obs	=	4,060
		Average RVI	=	0.0000
		Largest FMI	=	0.0000
DF adjustment: Large sample		<u>DF</u> : min	=	
		avg	=	•
		max	=	

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri ereri_cde ereri_intref ereri_intmed ereri_pie	.0092236 .0199201 0202144 0012756 .0107936	.019975 .0181507 .006299 .0009076	0.46 1.10 -3.21 -1.41 1.61	0.644 0.272 0.001 0.160 0.108	0299266 0156545 0325603 0030544 0023838	.0483739 .0554947 0078686 .0005033 .023971

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

max

Multiple-imputation estimates		Imputations	=	5
		Number of obs	=	4,060
		Average RVI	=	0.0000
		Largest FMI	=	0.0000
DF adjustment:	Large sample	<u>DF</u> : min	=	
		avg	=	

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	.0088882	.0199479	0.45	0.656	0302089	.0479854
ereri cde	.0259514	.0180253	1.44	0.150	0093777	.0612804
ereri intref	0155719	.0068724	-2.27	0.023	0290416	0021022
ereri intmed	.0001363	.0005395	0.25	0.801	0009212	.0011937
ereri pie	0016275	.0063951	-0.25	0.799	0141616	.0109066

```
138 .
```

142 . capture drop zpoorsleep_2006

143 . capture drop zpoorsleepalt 2006

144 . capture drop zlnhurd_odds

145 . capture drop zlnexpert_odds

146 . capture drop zlnlasso odds

147 . 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)

(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)

m=3:

(36,570 missing values generated)

^{139 .}

^{140 .}

```
Tuesday December 12 08:01:43 2023 Page 23
    (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)
    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)
    (36,570 missing values generated)
148 .
149 . 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
```

(file C:\Users\baydounm\AppData\Local\Temp\ST_6434_000002.tmp
file C:\Users\baydounm\AppData\Local\Temp\ST_6434_000002.tmp
150 .

152 .
153 . foreach m of varlist zlnhurd_odds zlnexpert_odds zlnlasso_odds {
 2. mi estimate, cmdok esampvaryok: med4way zpoorsleep_2006 `m' AGE2006 SEX NonWhite if NonWhite==0 , a0(0) a1(1
 3. }

Warning: this analysis assumes a rare outcome.

151 .

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the Warning: this analysis assumes a rare outcome.

Coefficient Std. err. P>|t| [95% conf. interval] 3.07 0.002 .0870559 tereri .0531075 .0173209 .0191591 ereri_cde .0537098 0.001 .0166769 3.22 .0210236 .0863959 ereri_intref -.0001978 .0025655 -0.08 0.939 -.0052262 .0048305 ereri_intmed -.000013 .0001288 -0.10 0.920 -.0002655 .0002395 -.0003914 0.919 -.0079019 ereri_pie .003832 -0.10 .0071191

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

max

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

avg = . max = .

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	.0457691	.0174178	2.63	0.009	.0116309	.0799074
ereri_cde	.0467597	.0162727	2.87	0.004	.0148659	.0786535
ereri_intref	0094767	.003652	-2.59	0.009	0166345	0023189
ereri_intmed	0005484	.0004714	-1.16	0.245	0014724	.0003755
ereri_pie	.0090346	.0054676	1.65	0.098	0016818	.019751

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	.0433504	.0172777	2.51	0.012	.0094867	.0772141
ereri_cde	.0519718	.0162453	3.20	0.001	.0201316	.0838119
ereri_intref	0093252	.003673	-2.54	0.011	0165241	0021263
ereri_intmed	0000446	.0003134	-0.14	0.887	0006588	.0005696
ereri_pie	.0007484	.005234	0.14	0.886	0095101	.011007

154 .

155 .

156 .

157 . *****SENSITIVITY ANALYSIS, NHW******

158 .

159 . foreach m of varlist zlnhurd_odds zlnexpert_odds zlnlasso_odds {

2. mi estimate, cmdok esampvaryok: med4way zpoorsleepalt_2006 `m' AGE2006 SEX NonWhite if NonWhite==0 , a0(0) a 3. }

max

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Multiple-imputat	tion estimates	Imputations	=	5
		Number of obs	=	5,666
		Average RVI	=	0.0000
		Largest FMI	=	0.0000
DF adjustment:	Large sample	<u>DF</u> : min	=	
		avg	=	
		max	=	

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	.0426146	.0172485	2.47	0.013	.0088081	.0764211
ereri_cde	.0455927	.016644	2.74	0.006	.0129709	.0782144
ereri_intref	0006782	.00257	-0.26	0.792	0057153	.0043589
ereri_intmed	0000424	.0001336	-0.32	0.751	0003042	.0002194
ereri_pie	0022575	.0038237	-0.59	0.555	0097518	.0052368

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Multiple-imputation estimates		Imputations	=	5
		Number of obs	=	5,666
		Average RVI	=	0.0000
		Largest FMI	=	0.0000
DF adjustment:	Large sample	<u>DF</u> : min	=	•
		avg	=	•
		max	=	•

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	.0354843	.0173161	2.05	0.040	.0015454	.0694232
ereri_cde	.0383222	.0162255	2.36	0.018	.0065208	.0701235
ereri_intref	010111	.00365	-2.77	0.006	0172648	0029571
ereri_intmed	000566	.0004904	-1.15	0.248	0015273	.0003952
ereri_pie	.0078392	.0054609	1.44	0.151	0028639	.0185423

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

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Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Multiple-imputation estimates		Imputations	=	5
		Number of obs	=	5,666
		Average RVI	=	0.0000
		Largest FMI	=	0.0000
DF adjustment:	Large sample	<u>DF</u> : min	=	
		avg	=	
		max	=	

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri ereri_cde ereri_intref ereri_intmed ereri_pie	.0328911 .043853 0100874 .0000682 0009427	.0171847 .0162077 .003663 .0003795	1.91 2.71 -2.75 0.18 -0.18	0.056 0.007 0.006 0.857 0.857	0007903 .0120866 0172667 0006756 0111808	.0665726 .0756194 0029082 .0008121 .0092954

160 .

162 . capture drop zpoorsleep_2006

```
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                                         Page 27
163 . capture drop zpoorsleepalt_2006
164 . capture drop zlnhurd_odds
165 . capture drop zlnexpert odds
166 . capture drop zlnlasso_odds
167 . 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)
    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)
   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)
   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:

```
Tuesday December 12 08:01:44 2023
                                        Page 28
    (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)
168 .
169 . 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
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 if NonWhite==1 , a0(0) a1(1
    Warning: this analysis assumes a rare outcome.
    Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the
    Warning: this analysis assumes a rare outcome.
    Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the
    Warning: this analysis assumes a rare outcome.
    Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the
    Warning: this analysis assumes a rare outcome.
    Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the
    Warning: this analysis assumes a rare outcome.
```

Multiple-imputation estimates		Imputations	=	5
		Number of obs	=	1,325
		Average RVI	=	0.0000
		Largest FMI	=	0.0000
DF adjustment:	Large sample	<u>DF</u> : min	=	•
		avg	=	
		max	=	

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri ereri_cde ereri_intref ereri_intmed ereri_pie	00793	.033866	-0.23	0.815	074306	.0584461
	0246619	.0310683	-0.79	0.427	0855546	.0362308
	0038815	.0113912	-0.34	0.733	0262079	.0184449
	0006773	.0017507	-0.39	0.699	0041087	.0027541
	.0212907	.0078477	2.71	0.007	.0059095	.0366719

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri	0193901	.0342508	-0.57	0.571	0865204	.0477401
ereri_cde	026851	.0315244	-0.85	0.394	0886377	.0349357
ereri_intref	0289869	.0172197	-1.68	0.092	0627369	.0047631
ereri_intmed	0068756	.0042625	-1.61	0.107	0152299	.0014788
ereri_pie	.0433233	.0107849	4.02	0.000	.0221853	.0644613

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

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Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

max

Coefficient Std. err. P>|t| [95% conf. interval] t tereri -.0130035 .034592 -0.38 0.707 -.0808026 .0547955 ereri_cde -.0289132 .030435 -0.95 0.342 -.0885647 .0307383 ereri_intref -.0161982 -0.99 0.322 -.0482287 .0163424 .0158323 0.314 ereri_intmed -.0031271 .0031029 -1.01 -.0092086 .0029544 ereri pie .035235 .0106112 3.32 0.001 .0144374 .0560326

```
175 .
176 . *****SENSITIVITY ANALYSIS, Non-White******
```

177

178 . foreach m of varlist zlnhurd_odds zlnexpert_odds zlnlasso_odds {

2. mi estimate, cmdok esampvaryok: med4way zpoorsleepalt_2006 `m' AGE2006 SEX NonWhite if NonWhite==1 , a0(0) a
3. }

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.
Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Multiple-imputation estimates Imputations Number of obs 1,325 Average RVI 0.0000 Largest FMI 0.0000 DF adjustment: Large sample DF: min avg

Coefficient Std. err. P>|t| [95% conf. interval] -0.50 0.620 tereri -.0163719 .0330191 -.081088 .0483443 ereri_cde -.0301902 -0.99 0.321 .0294817 .0304454 -.0898622 ereri_intref -.0018161 .0118397 -0.15 0.878 -.0250214 .0213893 ereri_intmed -.0002873 .001341 -0.21 0.830 -.0029156 .002341 ereri_pie .0159217 .0076197 2.09 0.037 .0009873 .0308562

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

max

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

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Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Multiple-imputation estimates Imputations Number of obs 1,325 Average RVI 0.0000 Largest FMI 0.0000 DF adjustment: Large sample DF: min

avg max

	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
tereri ereri_cde ereri_intref ereri_intmed ereri_pie	02867 0298297 0320221 0070443 .040226	.0332467 .0309181 .016716 .0039502 .0105283	-0.86 -0.96 -1.92 -1.78 3.82	0.388 0.335 0.055 0.075 0.000	0938324 0904281 0647848 0147865 .019591	.0364924 .0307687 .0007406 .000698

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Warning: fixed values for the covariates AGE2006 SEX NonWhite were not provided. All covariates are fixed at the

Warning: this analysis assumes a rare outcome.

Multiple-imputation estimates Imputations 5 Number of obs 1,325 Average RVI 0.0000 0.0000 Largest FMI = DF adjustment: Large sample <u>DF</u>: min = avg

max

Coefficient Std. err. P>|t| [95% conf. interval] t 0.492 -.0230341 -0.69 -.0887673 .0426991 tereri .033538 ereri_cde -.0316987 .0298515 -1.06 0.288 -.0902066 .0268092 .0122261 ereri_intref -.0188888 .0158752 -1.19 0.234 -.0500037 ereri_intmed -.0031746 .0027188 -1.17 0.243 -.0085033 .0021542 ereri_pie .0307279 .0103161 2.98 0.003 .0105087 .0509471

179 .

180 .

181 . save finaldata_imputed_FINAL, replace
 file finaldata_imputed_FINAL.dta saved

182 . 183 .

184 . 185 .

186 . capture log close