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

_____

```
      name:  <unnamed>
       log:  E:\16GBBACKUPUSB\BACKUP_USB_SEPTEMBER2014\May Baydoun_folder\HANDLS_PAPER64_HCYDEPANXIETY_LONG\OUTPU
  log type:  smcl
 opened on:  21 Jun 2024, 06:38:17
```

```
 1 .
 2 .
 3 . *************************SENSITIVITY ANALYSIS 1: WITH CHANGE IN HCY BETWEEN WAVES 1 AND 3******************
 4 .
 5 . use finaldata_imputed_FINAL,clear

 6 .
 7 . capture drop w1w3HCys_change

 8 . gen w1w3HCys_change=(w3HCys-w1HCys)/(w3Age-w1Age)
   (40,620 missing values generated)

 9 .
10 . capture drop zw1w3HCys_change

11 . mi passive: egen zw1w3HCys_change=std(w1w3HCys_change) if sample4obs==1
   (passive variable zw1w3HCys_change unregistered because not in m=0)
   m=0:
   (8,152 missing values generated)
   m=1:
   (8,152 missing values generated)
   m=2:
   (8,152 missing values generated)
   m=3:
   (8,152 missing values generated)
   m=4:
   (8,152 missing values generated)
   m=5:
   (8,152 missing values generated)

12 .
13 . save, replace
   (file C:\Users\baydounm\AppData\Local\Temp\ST_55ec_000002.tmp not found)
   file C:\Users\baydounm\AppData\Local\Temp\ST_55ec_000002.tmp saved as .dta format

14 .
15 .
16 .
17 .
18 . //////////////TABLE 3: TRAJECTORY OF HCys LOAD VS. DEPRESSIVE SYMPTOMS////////////////////////////////////
   >
19 .
20 . //MODEL 1: INCLUDE ONLY AGE, SEX, RACE AND POVERTY STATUS///
21 . mi estimate: mixed CES  c.timew1w3w4##c.w1Agecent48 c.timew1w3w4##Sex c.timew1w3w4##Race  c.timew1w3w4##PovStat
   > c.timew1w3w4##c.zw1w3HCys_change   ///
   > if sample4obs==1 || HNDID: timew1w3w4, cov(un)

   Multiple-imputation estimates                  Imputations      =           5
   Mixed-effects ML regression                    Number of obs    =       3,829
```

Group variable: **HNDID**

```
                                   Number of groups  =        1,382
                                   Obs per group:
                                                 min =            1
                                                 avg =          2.8
                                                 max =            3
                                   Average RVI       =       0.0000
                                   Largest FMI       =       0.0000
DF adjustment:  Large sample       DF:    min        =      5.01e+61
                                          avg        =      4.69e+64
                                          max        =            .
Model F test:   Equal FMI          F( 13, 3.9e+63)   =         9.88
                                   Prob > F          =       0.0000
```

CES	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
timew1w3w4	-.230519	.0639531	-3.60	0.000	-.3558647	-.1051732
w1Agecent48	-.0922626	.0310858	-2.97	0.003	-.1531896	-.0313355
c.timew1w3w4#c.w1Agecent48	.0011994	.0036794	0.33	0.744	-.0060122	.008411
timew1w3w4	0	(omitted)				
Sex						
Men	-2.582971	.5744123	-4.50	0.000	-3.708799	-1.457144
Sex#c.timew1w3w4						
Men	.067635	.0674057	1.00	0.316	-.0644777	.1997477
timew1w3w4	0	(omitted)				
Race						
AfrAm	-1.68783	.5765008	-2.93	0.003	-2.817751	-.5579088
Race#c.timew1w3w4						
AfrAm	.1202736	.068426	1.76	0.079	-.0138389	.2543862
timew1w3w4	0	(omitted)				
PovStat						
Below	4.190062	.5977986	7.01	0.000	3.018399	5.361726
PovStat#c.timew1w3w4						
Below	.0177273	.0692336	0.26	0.798	-.1179681	.1534227
timew1w3w4	0	(omitted)				
invmillsCES	.0145114	.0290847	0.50	0.618	-.0424936	.0715164
c.timew1w3w4#c.invmillsCES	-.0026944	.0031554	-0.85	0.393	-.0088788	.00349
timew1w3w4	0	(omitted)				
zw1w3HCys_change	.2825026	.2788059	1.01	0.311	-.2639469	.8289522
c.timew1w3w4#c.zw1w3HCys_change	-.0099494	.0346655	-0.29	0.774	-.0778925	.0579938
_cons	14.88445	.5275674	28.21	0.000	13.85044	15.91846

Random-effects parameters	Estimate	Std. err.	[95% conf. interval]	
HNDID: Unstructured				
sd(timew1w3w4)	.2254401	.1587245	.0567192	.8960502
sd(_cons)	8.288134	.2707348	7.774133	8.836119
corr(timew1w3w4,_cons)	-.2943582	.1597278	-.5690326	.0394081
sd(Residual)	7.025089	.1367295	6.762151	7.298251

```
22 .
23 .
24 . mi estimate: mixed CES_DA c.timew1w3w4##c.w1Agecent48 c.timew1w3w4##Sex c.timew1w3w4##Race  c.timew1w3w4##PovSt
   > c.timew1w3w4##c.zw1w3HCys_change   ///
   > if sample4obs==1 || HNDID: timew1w3w4, cov(un)
```

Multiple-imputation estimates   Imputations   =   5
Mixed-effects ML regression   Number of obs   =   3,844

Group variable: **HNDID**   Number of groups   =   1,382
                                           Obs per group:
                                                      min =   1
                                                      avg =   2.8
                                                      max =   3
                                           Average RVI   =   .
                                           Largest FMI   =   .
DF adjustment: **Large sample**   DF: min =   0.00
                                                    avg =   .
                                                    max =   .
Model F test: **Equal FMI**   F(13, 3.8e+63)   =   10.93
                                           Prob > F   =   0.0000

CES_DA	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
timew1w3w4	-.1077561	.0278935	-3.86	0.000	-.1624263	-.0530859
w1Agecent48	-.0250667	.0135593	-1.85	0.065	-.0516424	.001509
c.timew1w3w4#c.w1Agecent48	-.0017996	.001606	-1.12	0.262	-.0049473	.0013481
timew1w3w4	0	(omitted)				
Sex						
Men	-1.398203	.2505054	-5.58	0.000	-1.889185	-.9072215
Sex#c.timew1w3w4						
Men	.0499879	.0294358	1.70	0.089	-.0077052	.107681
timew1w3w4	0	(omitted)				
Race						
AfrAm	-.6496142	.2514268	-2.58	0.010	-1.142402	-.1568268
Race#c.timew1w3w4						
AfrAm	.0200656	.0298917	0.67	0.502	-.0385212	.0786523
timew1w3w4	0	(omitted)				
PovStat						
Below	1.709173	.2608116	6.55	0.000	1.197991	2.220354
PovStat#c.timew1w3w4						

Below	-.0172696	.0302637	-0.57	0.568	-.0765854	.0420462
timew1w3w4	0	(omitted)				
invmillsCES	.0050837	.0127013	0.40	0.689	-.0198104	.0299779
c.timew1w3w4#c.invmillsCES	-.0007149	.0013842	-0.52	0.606	-.0034279	.0019981
timew1w3w4	0	(omitted)				
zw1w3HCys_change	.0109421	.121809	0.09	0.928	-.2277992	.2496834
c.timew1w3w4#c.zw1w3HCys_change	.0082911	.0152282	0.54	0.586	-.0215556	.0381379
_cons	4.799223	.2300839	20.86	0.000	4.348267	5.25018

Random-effects parameters	Estimate	Std. err.	[95% conf. interval]	
HNDID: Unstructured				
sd(timew1w3w4)	.0583465	.	.	.
sd(_cons)	3.570647	.	.	.
corr(timew1w3w4,_cons)	-1	.	.	.
sd(Residual)	3.139314	.	.	.

```
25 .
26 .
27 .
28 . mi estimate: mixed CES_IP c.timew1w3w4##c.w1Agecent48 c.timew1w3w4##Sex c.timew1w3w4##Race  c.timew1w3w4##PovSt
> c.timew1w3w4##c.zw1w3HCys_change   ///
> if sample4obs==1 || HNDID: timew1w3w4, cov(un)
```

Multiple-imputation estimates		Imputations	=	5
Mixed-effects ML regression		Number of obs	=	3,844
Group variable: **HNDID**		Number of groups	=	1,382
		Obs per group:		
		min =		1
		avg =		2.8
		max =		3
		Average RVI	=	0.0000
		Largest FMI	=	0.0000
DF adjustment: **Large sample**		DF: min	=	8.40e+69
		avg	=	8.40e+69
		max	=	.
Model F test: **Equal FMI**		F(13, .)	=	4.87
		Prob > F	=	0.0000

CES_IP	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
timew1w3w4	-.009062	.0088406	-1.03	0.305	-.0263892	.0082651
w1Agecent48	-.0108192	.0036805	-2.94	0.003	-.018033	-.0036055
c.timew1w3w4#c.w1Agecent48	.0000473	.0005091	0.09	0.926	-.0009506	.0010452
timew1w3w4	0	(omitted)				
Sex						
Men	.1044598	.0679983	1.54	0.124	-.0288144	.237734
Sex#c.timew1w3w4						

Men	-.01399	.0093338	-1.50	0.134	-.0322839	.0043038
timew1w3w4	0	(omitted)				
Race						
AfrAm	.0123136	.0682603	0.18	0.857	-.1214742	.1461013
Race#c.timew1w3w4						
AfrAm	.006007	.0094798	0.63	0.526	-.012573	.024587
timew1w3w4	0	(omitted)				
PovStat						
Below	.3333198	.0708735	4.70	0.000	.1944103	.4722293
PovStat#c.timew1w3w4						
Below	-.0028435	.0095984	-0.30	0.767	-.0216559	.015969
timew1w3w4	0	(omitted)				
invmillsCES	.0052243	.0034524	1.51	0.130	-.0015423	.0119909
c.timew1w3w4#c.invmillsCES	-.0005338	.0004395	-1.21	0.225	-.0013953	.0003276
timew1w3w4	0	(omitted)				
zw1w3HCys_change	.02395	.0332051	0.72	0.471	-.0411308	.0890308
c.timew1w3w4#c.zw1w3HCys_change	.0001985	.0048326	0.04	0.967	-.0092732	.0096701
_cons	.776618	.0623725	12.45	0.000	.6543702	.8988659

Random-effects parameters	Estimate	Std. err.	[95% conf. interval]	
HNDID: Unstructured				
sd(timew1w3w4)	.0101671	.0056436	.0034254	.0301775
sd(_cons)	.841539	.0339892	.7774899	.9108643
corr(timew1w3w4,_cons)	-.9999972	.0012965	-1	1
sd(Residual)	1.002698	.0142696	.9751167	1.03106

29 .
30 .
31 .
32 . mi estimate: mixed CES_SC c.timew1w3w4##c.w1Agecent48 c.timew1w3w4##Sex c.timew1w3w4##Race c.timew1w3w4##PovSt
   > c.timew1w3w4##c.zw1w3HCys_change   ///
   > if sample4obs==1 || HNDID: timew1w3w4, cov(un)

Multiple-imputation estimates	Imputations	=	5
Mixed-effects ML regression	Number of obs	=	3,844

Group variable: **HNDID**		Number of groups	=	1,382

Obs per group:
	min =	1
	avg =	2.8
	max =	3
Average RVI	=	0.0000
Largest FMI	=	0.0000

DF adjustment:	**Large sample**	DF:	min	=	5.35e+57
			avg	=	4.48e+67
			max	=	.

Model F test:	**Equal FMI**	F(13, 9.9e+62)	=	11.18
		Prob > F	=	0.0000

CES_SC	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
timew1w3w4	-.1134637	.0279903	-4.05	0.000	-.1683236	-.0586039
w1Agecent48	-.0376984	.0122608	-3.07	0.002	-.0617291	-.0136677
c.timew1w3w4#c.w1Agecent48	.0010168	.0016116	0.63	0.528	-.0021418	.0041755
timew1w3w4	0	(omitted)				
Sex						
Men	-.9831204	.2265189	-4.34	0.000	-1.427089	-.5391515
Sex#c.timew1w3w4						
Men	.0391591	.0295363	1.33	0.185	-.018731	.0970493
timew1w3w4	0	(omitted)				
Race						
AfrAm	-.3173932	.2273675	-1.40	0.163	-.7630254	.128239
Race#c.timew1w3w4						
AfrAm	.0187456	.0299671	0.63	0.532	-.0399888	.0774799
timew1w3w4	0	(omitted)				
PovStat						
Below	1.61624	.2359288	6.85	0.000	1.153828	2.078652
PovStat#c.timew1w3w4						
Below	-.0039539	.03037	-0.13	0.896	-.0634781	.0555703
timew1w3w4	0	(omitted)				
invmillsCES	-.0009577	.0114883	-0.08	0.934	-.0234743	.0215589
c.timew1w3w4#c.invmillsCES	-.0007021	.0013897	-0.51	0.613	-.0034259	.0020217
timew1w3w4	0	(omitted)				
zw1w3HCys_change	.2000448	.1102765	1.81	0.070	-.0160931	.4161827
c.timew1w3w4#c.zw1w3HCys_change	-.0218274	.0151726	-1.44	0.150	-.0515652	.0079104
_cons	6.679625	.2079788	32.12	0.000	6.271994	7.087256

Random-effects parameters	Estimate	Std. err.	[95% conf. interval]	
HNDID: Unstructured				
sd(timew1w3w4)	.138508	.0480959	.0701296	.2735572
sd(_cons)	3.074881	.1161	2.855545	3.311064
corr(timew1w3w4,_cons)	-.3390278	.1103266	-.5351338	-.1082499
sd(Residual)	3.03147	.0579477	2.919995	3.147199

33 .
34 .
35 .
36 . mi estimate: mixed CES_WB c.timew1w3w4##c.w1Agecent48 c.timew1w3w4##Sex c.timew1w3w4##Race c.timew1w3w4##PovSt
> c.timew1w3w4##c.zw1w3HCys_change   ///
> if sample4obs==1 || HNDID: timew1w3w4, cov(un)

```
Multiple-imputation estimates              Imputations      =          5
Mixed-effects ML regression                Number of obs    =      3,844

Group variable: HNDID                      Number of groups =      1,382
                                           Obs per group:
                                                        min =          1
                                                        avg =        2.8
                                                        max =          3
                                           Average RVI      =     0.0000
                                           Largest FMI      =     0.0000
DF adjustment:   Large sample              DF:     min      =   1.81e+60
                                                   avg      =   1.81e+60
                                                   max      =          .
Model F test:      Equal FMI               F(  13,      .)  =       8.78
                                           Prob > F         =     0.0000
```

CES_WB	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
timew1w3w4	.0068747	.0192184	0.36	0.721	-.0307927	.0445422
w1Agecent48	.0186832	.0072718	2.57	0.010	.0044307	.0329358
c.timew1w3w4#c.w1Agecent48	-.0017662	.0011053	-1.60	0.110	-.0039326	.0004001
timew1w3w4	0	(omitted)				
Sex						
Men	.324135	.1343438	2.41	0.016	.0608259	.587444
Sex#c.timew1w3w4						
Men	.0039729	.0202422	0.20	0.844	-.0357011	.0436468
timew1w3w4	0	(omitted)				
Race						
AfrAm	.7552602	.1348742	5.60	0.000	.4909116	1.019609
Race#c.timew1w3w4						
AfrAm	-.0794522	.0205372	-3.87	0.000	-.1197045	-.0392
timew1w3w4	0	(omitted)				
PovStat						
Below	-.5187318	.1400559	-3.70	0.000	-.7932363	-.2442272

PovStat#c.timew1w3w4						
Below	-.0448389	.0207988	-2.16	0.031	-.0856039	-.004074
timew1w3w4	0	(omitted)				
invmillsCES	-.0053774	.0068235	-0.79	0.431	-.0187511	.0079964
c.timew1w3w4#c.invmillsCES	.0008027	.0009484	0.85	0.397	-.0010561	.0026614
timew1w3w4	0	(omitted)				
zw1w3HCys_change	-.0445694	.0656512	-0.68	0.497	-.1732434	.0841046
c.timew1w3w4#c.zw1w3HCys_change	-.0043702	.0103931	-0.42	0.674	-.0247404	.0159999
_cons	9.345744	.1232403	75.83	0.000	9.104197	9.58729

Random-effects parameters	Estimate	Std. err.	[95% conf. interval]	
HNDID: Unstructured				
sd(timew1w3w4)	.0845694	.0387898	.0344183	.2077963
sd(_cons)	1.553052	.0865825	1.392296	1.732369
corr(timew1w3w4,_cons)	.5919212	.5143646	-.7020063	.9772515
sd(Residual)	2.077911	.0408316	1.999404	2.159501

```
37 .
38 .
39 . save, replace
   (file C:\Users\baydounm\AppData\Local\Temp\ST_55ec_000002.tmp not found)
   file C:\Users\baydounm\AppData\Local\Temp\ST_55ec_000002.tmp saved as .dta format

40 .
41 .
42 .
43 .
44 . //MODEL 2: FULL MODEL///
45 .
46 . mi estimate: mixed CES  c.timew1w3w4##c.w1Agecent48 c.timew1w3w4##Sex c.timew1w3w4##Race  c.timew1w3w4##PovStat
   > c.timew1w3w4##w1smoke  c.timew1w3w4##w1currdrugs c.timew1w3w4##c.w1hei2010_total_scorecent43 ///
   > c.timew1w3w4##c.w1BMIcent30 ///
   > c.timew1w3w4##c.zw1w3HCys_change   ///
   > if sample4obs==1 || HNDID: timew1w3w4, cov(un)
```

Multiple-imputation estimates		Imputations	=	5
Mixed-effects ML regression		Number of obs	=	3,829
Group variable: **HNDID**		Number of groups	=	1,382
		Obs per group:		
		min =		1
		avg =		2.8
		max =		3
		Average RVI	=	0.0746
		Largest FMI	=	0.3584
DF adjustment: **Large sample**		DF: min	=	37.80
		avg	=	757,295.71
		max	=	1.36e+07
Model F test: **Equal FMI**		F(25,14248.6)	=	8.87
		Prob > F	=	0.0000

CES	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
timew1w3w4	-.3847664	.1640855	-2.34	0.019	-.7063969	-.0631359
w1Agecent48	-.0671837	.0308724	-2.18	0.030	-.1276931	-.0066742
c.timew1w3w4#c.w1Agecent48	.00045	.0037704	0.12	0.905	-.0069398	.0078399
timew1w3w4	0	(omitted)				
Sex						
Men	-3.006783	.572554	-5.25	0.000	-4.128994	-1.884571
Sex#c.timew1w3w4						
Men	.085895	.0692002	1.24	0.215	-.0497382	.2215282
timew1w3w4	0	(omitted)				
Race						
AfrAm	-1.830846	.5675609	-3.23	0.001	-2.943271	-.71842
Race#c.timew1w3w4						
AfrAm	.1079767	.069729	1.55	0.121	-.0286906	.2446439
timew1w3w4	0	(omitted)				
PovStat						
Below	2.89392	.6070533	4.77	0.000	1.704024	4.083817
PovStat#c.timew1w3w4						
Below	.037931	.0727088	0.52	0.602	-.1045789	.1804409
timew1w3w4	0	(omitted)				
w1edubr						
2	-1.974259	1.206011	-1.64	0.102	-4.338768	.3902513
3	-4.172811	1.266922	-3.29	0.001	-6.65702	-1.688601
w1edubr#c.timew1w3w4						
2	.2267552	.1546649	1.47	0.143	-.0763937	.5299041
3	.1785248	.1609388	1.11	0.267	-.1369114	.493961
timew1w3w4	0	(omitted)				
invmillsCES	.0205209	.0282914	0.73	0.468	-.0349293	.0759712
c.timew1w3w4#c.invmillsCES	-.0024846	.0031679	-0.78	0.433	-.0086936	.0037244
timew1w3w4	0	(omitted)				
1.w1smoke	1.791893	.6251956	2.87	0.004	.5636538	3.020132
w1smoke#c.timew1w3w4						
1	-.0189188	.0818075	-0.23	0.817	-.1795403	.1417026
timew1w3w4	0	(omitted)				
1.w1currdrugs	2.841631	.8030649	3.54	0.001	1.250345	4.432917
w1currdrugs#c.timew1w3w4						
1	-.1922921	.1107891	-1.74	0.089	-.4148052	.0302209
timew1w3w4	0	(omitted)				
w1hei2010_total_scorecent43	-.0588707	.0272027	-2.16	0.037	-.1139493	-.0037921
c.timew1w3w4#c.w1hei2010_total_scorecent43	-.0005135	.0033788	-0.15	0.879	-.0071725	.0061456

timew1w3w4	0	(omitted)				
w1BMIcent30	.0756426	.0393305	1.92	0.054	-.0014514	.1527366
c.timew1w3w4#c.w1BMIcent30	-.0000689	.0048013	-0.01	0.989	-.0094795	.0093417
timew1w3w4	0	(omitted)				
zw1w3HCys_change	.1348841	.2721141	0.50	0.620	-.3984499	.6682182
c.timew1w3w4#c.zw1w3HCys_change	-.0077645	.0348416	-0.22	0.824	-.0760528	.0605238
_cons	17.01614	1.258894	13.52	0.000	14.54855	19.48374

Random-effects parameters	Estimate	Std. err.	[95% conf. interval]	
HNDID: Unstructured				
sd(timew1w3w4)	.2230894	.161927	.0537821	.9253807
sd(_cons)	7.888869	.2712157	7.374807	8.438764
corr(timew1w3w4,_cons)	-.2841083	.1644641	-.566806	.0584469
sd(Residual)	7.029772	.137947	6.7645	7.305447

47 .
48 .
49 . mi estimate: mixed CES_DA c.timew1w3w4##c.w1Agecent48 c.timew1w3w4##Sex c.timew1w3w4##Race c.timew1w3w4##PovSt
> c.timew1w3w4##w1smoke c.timew1w3w4##w1currdrugs c.timew1w3w4##c.w1hei2010_total_scorecent43 ///
> c.timew1w3w4##c.w1BMIcent30 ///
> c.timew1w3w4##c.zw1w3HCys_change   ///
> if sample4obs==1 || HNDID: timew1w3w4, cov(un)

Multiple-imputation estimates   Imputations   =   5
Mixed-effects ML regression   Number of obs   =   3,844

Group variable: **HNDID**   Number of groups =   1,382
                                        Obs per group:
                                                      min =   1
                                                      avg =   2.8
                                                      max =   3
                                        Average RVI   =   .
                                        Largest FMI   =   .
DF adjustment: **Large sample**   DF: min   =   0.00
                                                avg   =   .
                                                max   =   .
Model F test: **Equal FMI**   F(25,17434.5)   =   8.04
                                        Prob > F   =   0.0000

CES_DA	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
timew1w3w4	-.1622786	.0712991	-2.28	0.023	-.3020255	-.0225317
w1Agecent48	-.0148735	.0135874	-1.09	0.274	-.0415046	.0117575
c.timew1w3w4#c.w1Agecent48	-.0022047	.0016448	-1.34	0.180	-.0054284	.0010191
timew1w3w4	0	(omitted)				
Sex						
Men	-1.553656	.2514186	-6.18	0.000	-2.046431	-1.060881
Sex#c.timew1w3w4						

Men	.0592083	.0301801	1.96	0.050	.0000557	.1183609
timew1w3w4	0	(omitted)				
Race						
AfrAm	-.7244403	.2491748	-2.91	0.004	-1.212817	-.2360637
Race#c.timew1w3w4						
AfrAm	.0172271	.0304561	0.57	0.572	-.042466	.0769202
timew1w3w4	0	(omitted)				
PovStat						
Below	1.241895	.2667504	4.66	0.000	.7190484	1.764742
PovStat#c.timew1w3w4						
Below	-.0014238	.0317386	-0.04	0.964	-.0636307	.0607831
timew1w3w4	0	(omitted)				
w1edubr						
2	-.5330733	.5367937	-0.99	0.321	-1.586156	.5200098
3	-1.351922	.5586001	-2.42	0.016	-2.447339	-.2565061
w1edubr#c.timew1w3w4						
2	.0669174	.0674001	0.99	0.321	-.065188	.1990228
3	.0790877	.0702724	1.13	0.260	-.0586453	.2168206
timew1w3w4	0	(omitted)				
invmillsCES	.0071775	.0124611	0.58	0.565	-.0172458	.0316008
c.timew1w3w4#c.invmillsCES	-.0006703	.0013885	-0.48	0.629	-.0033917	.0020512
timew1w3w4	0	(omitted)				
1.w1smoke	.6575273	.2682791	2.45	0.014	.1315567	1.183498
w1smoke#c.timew1w3w4						
1	-.0184264	.0348814	-0.53	0.597	-.0868094	.0499565
timew1w3w4	0	(omitted)				
1.w1currdrugs	1.20686	.3439719	3.51	0.001	.5288678	1.884853
w1currdrugs#c.timew1w3w4						
1	-.0620974	.0459221	-1.35	0.179	-.1532523	.0290576
timew1w3w4	0	(omitted)				
w1hei2010_total_scorecent43	-.0181903	.0130578	-1.39	0.177	-.0452508	.0088701
c.timew1w3w4#c.w1hei2010_total_scorecent43	-.000017	.0014785	-0.01	0.991	-.0029327	.0028986
timew1w3w4	0	(omitted)				
w1BMIcent30	.0300502	.0172074	1.75	0.081	-.003676	.0637763
c.timew1w3w4#c.w1BMIcent30	.0007459	.0021	0.36	0.722	-.00337	.0048619
timew1w3w4	0	(omitted)				
zw1w3HCys_change	-.0485279	.1198557	-0.40	0.686	-.2834407	.1863849
c.timew1w3w4#c.zw1w3HCys_change	.0100729	.0152996	0.66	0.510	-.0199137	.0400595
_cons	5.387628	.5558094	9.69	0.000	4.298082	6.477174

Random-effects parameters	Estimate	Std. err.	[95% conf. interval]	
HNDID: Unstructured				
sd(timew1w3w4)	.0546546	.	.	.
sd(_cons)	3.444088	.	.	.
corr(timew1w3w4,_cons)	-1	.	.	.
sd(Residual)	3.140714	.	.	.

50 .
51 .
52 .
53 . mi estimate: mixed CES_IP c.timew1w3w4##c.w1Agecent48 c.timew1w3w4##Sex c.timew1w3w4##Race c.timew1w3w4##PovSt
> c.timew1w3w4##w1smoke c.timew1w3w4##w1currdrugs c.timew1w3w4##c.w1hei2010_total_scorecent43 ///
> c.timew1w3w4##c.w1BMIcent30 ///
> c.timew1w3w4##c.zw1w3HCys_change   ///
> if sample4obs==1 || HNDID: timew1w3w4, cov(un)

Multiple-imputation estimates		Imputations	=		5
Mixed-effects ML regression		Number of obs	=		3,844
Group variable: **HNDID**		Number of groups	=		1,382
		Obs per group:			
		min	=		1
		avg	=		2.8
		max	=		3
		Average RVI	=		.
		Largest FMI	=		.
DF adjustment: **Large sample**		DF: min	=		0.00
		avg	=		.
		max	=		.
Model F test: **Equal FMI**		F(25,34170.1)	=		3.74
		Prob > F	=		0.0000

CES_IP	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
timew1w3w4	-.0184814	.0225997	-0.82	0.413	-.062777	.0258142
w1Agecent48	-.0088425	.0037359	-2.37	0.018	-.0161649	-.0015202
c.timew1w3w4#c.w1Agecent48	-.0000686	.0005221	-0.13	0.895	-.0010919	.0009546
timew1w3w4	0	(omitted)				
Sex						
Men	.0764547	.0692099	1.10	0.269	-.0591977	.212107
Sex#c.timew1w3w4						
Men	-.0123214	.0095703	-1.29	0.198	-.0310792	.0064364
timew1w3w4	0	(omitted)				
Race						
AfrAm	-.0010523	.0684557	-0.02	0.988	-.1352238	.1331192
Race#c.timew1w3w4						
AfrAm	.0063095	.0096461	0.65	0.513	-.0125965	.0252154
timew1w3w4	0	(omitted)				
PovStat						

Below	.2506037	.0731591	3.43	0.001	.1072124	.3939951
PovStat#c.timew1w3w4						
Below	-.0002752	.0100709	-0.03	0.978	-.020014	.0194636
timew1w3w4	0	(omitted)				
w1edubr						
2	-.0909891	.1446862	-0.63	0.529	-.3745714	.1925931
3	-.2880932	.1517822	-1.90	0.058	-.585584	.0093976
w1edubr#c.timew1w3w4						
2	.0107764	.0213286	0.51	0.613	-.0310275	.0525802
3	.0132234	.022434	0.59	0.556	-.0307518	.0571987
timew1w3w4	0	(omitted)				
invmillsCES	.0058373	.0034257	1.70	0.088	-.0008769	.0125514
c.timew1w3w4#c.invmillsCES	-.0005453	.0004406	-1.24	0.216	-.0014088	.0003183
timew1w3w4	0	(omitted)				
1.w1smoke	.0247048	.0790056	0.31	0.755	-.1306977	.1801073
w1smoke#c.timew1w3w4						
1	.0035669	.0109445	0.33	0.745	-.0178849	.0250186
timew1w3w4	0	(omitted)				
1.w1currdrugs	.2635958	.1029513	2.56	0.012	.0585779	.4686137
w1currdrugs#c.timew1w3w4						
1	-.0259403	.0138583	-1.87	0.062	-.0532302	.0013497
timew1w3w4	0	(omitted)				
w1hei2010_total_scorecent43	-.0047716	.0035582	-1.34	0.189	-.0120078	.0024646
c.timew1w3w4#c.w1hei2010_total_scorecent43	.000109	.0004822	0.23	0.822	-.0008468	.0010647
timew1w3w4	0	(omitted)				
w1BMIcent30	.0057336	.0047716	1.20	0.230	-.0036197	.015087
c.timew1w3w4#c.w1BMIcent30	-.0002849	.0006637	-0.43	0.668	-.0015857	.0010159
timew1w3w4	0	(omitted)				
zw1w3HCys_change	.0113857	.0330679	0.34	0.731	-.0534262	.0761977
c.timew1w3w4#c.zw1w3HCys_change	.0008171	.0048512	0.17	0.866	-.0086911	.0103252
_cons	.9279764	.152703	6.08	0.000	.6286754	1.227277

Random-effects parameters	Estimate	Std. err.	[95% conf. interval]	
HNDID: Unstructured				
sd(timew1w3w4)	.0091713	.	.	.
sd(_cons)	.8238451	.	.	.
corr(timew1w3w4,_cons)	-.999998	.	.	.
sd(Residual)	1.001988	.	.	.

```
54 .
55 .
56 .
57 . mi estimate: mixed CES_SC c.timew1w3w4##c.w1Agecent48 c.timew1w3w4##Sex c.timew1w3w4##Race  c.timew1w3w4##PovSt
   > c.timew1w3w4##w1smoke  c.timew1w3w4##w1currdrugs c.timew1w3w4##c.w1hei2010_total_scorecent43 ///
   > c.timew1w3w4##c.w1BMIcent30 ///
   > c.timew1w3w4##c.zw1w3HCys_change    ///
   > if sample4obs==1 || HNDID: timew1w3w4, cov(un)
```

Multiple-imputation estimates   Imputations   =   5
Mixed-effects ML regression   Number of obs   =   3,844

Group variable: **HNDID**   Number of groups =   1,382
                                       Obs per group:
                                                     min =   1
                                                     avg =   2.8
                                                     max =   3
                                       Average RVI   =   0.0606
                                       Largest FMI   =   0.3345
DF adjustment: **Large sample**   DF: min   =   43.18
                                                   avg   =   885,088.19
                                                   max   =   1.38e+07
Model F test: **Equal FMI**   F(25,21133.6) =   10.75
                                       Prob > F   =   0.0000

CES_SC	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
timew1w3w4	-.1939969	.0719526	-2.70	0.007	-.3350484	-.0529454
w1Agecent48	-.0284887	.0121661	-2.34	0.019	-.0523338	-.0046436
c.timew1w3w4#c.w1Agecent48	.0012174	.0016507	0.74	0.461	-.0020179	.0044527
timew1w3w4	0	(omitted)				
Sex						
Men	-1.151678	.2257938	-5.10	0.000	-1.594235	-.7091219
Sex#c.timew1w3w4						
Men	.0399327	.0303696	1.31	0.189	-.0195921	.0994575
timew1w3w4	0	(omitted)				
Race						
AfrAm	-.3577863	.2237974	-1.60	0.110	-.7964296	.0808571
Race#c.timew1w3w4						
AfrAm	.0080985	.0305902	0.26	0.791	-.051858	.0680549
timew1w3w4	0	(omitted)				
PovStat						
Below	1.070855	.2394674	4.47	0.000	.60148	1.54023
PovStat#c.timew1w3w4						
Below	-.000061	.0319069	-0.00	0.998	-.0625983	.0624763
timew1w3w4	0	(omitted)				
w1edubr						
2	-.7182317	.4736916	-1.52	0.129	-1.64673	.2102662
3	-1.664448	.503394	-3.31	0.001	-2.651629	-.6772674

w1edubr#c.timew1w3w4						
2	.1050807	.0679067	1.55	0.122	-.0280332	.2381947
3	.0984071	.0704849	1.40	0.163	-.0397442	.2365584
timew1w3w4	0	(omitted)				
invmillsCES	.0012286	.011174	0.11	0.912	-.0206721	.0231293
c.timew1w3w4#c.invmillsCES	-.000528	.0013983	-0.38	0.706	-.0032686	.0022126
timew1w3w4	0	(omitted)				
1.w1smoke	.8602446	.2594902	3.32	0.001	.3487814	1.371708
w1smoke#c.timew1w3w4						
1	-.0048298	.0360729	-0.13	0.894	-.0757024	.0660428
timew1w3w4	0	(omitted)				
1.w1currdrugs	.857948	.3061174	2.80	0.005	.2565498	1.459346
w1currdrugs#c.timew1w3w4						
1	-.029446	.0492439	-0.60	0.553	-.1287435	.0698515
timew1w3w4	0	(omitted)				
w1hei2010_total_scorecent43	-.0254089	.0103271	-2.46	0.016	-.0459067	-.0049111
c.timew1w3w4#c.w1hei2010_total_scorecent43	-.0013187	.0014893	-0.89	0.377	-.0042576	.0016201
timew1w3w4	0	(omitted)				
w1BMIcent30	.0277373	.0155528	1.78	0.075	-.0027491	.0582236
c.timew1w3w4#c.w1BMIcent30	.0002052	.0021142	0.10	0.923	-.0039389	.0043493
timew1w3w4	0	(omitted)				
zw1w3HCys_change	.1420575	.1076019	1.32	0.187	-.0688384	.3529533
c.timew1w3w4#c.zw1w3HCys_change	-.0216053	.0152694	-1.41	0.157	-.0515328	.0083222
_cons	7.473849	.5014203	14.91	0.000	6.490866	8.456831

Random-effects parameters	Estimate	Std. err.	[95% conf. interval]	
HNDID: Unstructured				
sd(timew1w3w4)	.142074	.047434	.0738424	.2733528
sd(_cons)	2.906748	.1171581	2.685958	3.145688
corr(timew1w3w4,_cons)	-.3790651	.1075924	-.5684509	-.1515275
sd(Residual)	3.032203	.0582257	2.920195	3.148507

58 .

```
59 .
60 .
61 . mi estimate: mixed CES_WB c.timew1w3w4##c.w1Agecent48 c.timew1w3w4##Sex c.timew1w3w4##Race  c.timew1w3w4##PovSt
   > c.timew1w3w4##w1smoke  c.timew1w3w4##w1currdrugs c.timew1w3w4##c.w1hei2010_total_scorecent43 ///
   > c.timew1w3w4##c.w1BMIcent30 ///
   > c.timew1w3w4##c.zw1w3HCys_change    ///
   > if sample4obs==1 || HNDID: timew1w3w4, cov(un)
```

Multiple-imputation estimates	Imputations =	5
Mixed-effects ML regression	Number of obs =	3,844
Group variable: **HNDID**	Number of groups =	1,382
	Obs per group:	
	min =	1
	avg =	2.8
	max =	3
	Average RVI =	0.0718
	Largest FMI =	0.2764
DF adjustment: **Large sample**	DF: min =	62.25
	avg =	1124023.44
	max =	1.92e+07
Model F test: **Equal FMI**	F(25,15097.1) =	6.78
	Prob > F =	0.0000

CES_WB	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
timew1w3w4	.0012859	.0491587	0.03	0.979	-.0950789	.0976507
w1Agecent48	.0142129	.0073461	1.93	0.053	-.0001855	.0286112
c.timew1w3w4#c.w1Agecent48	-.0014432	.001132	-1.27	0.202	-.003662	.0007756
timew1w3w4	0	(omitted)				
Sex						
Men	.4074156	.1358462	3.00	0.003	.1411596	.6736717
Sex#c.timew1w3w4						
Men	-.0004681	.0206943	-0.02	0.982	-.0410286	.0400924
timew1w3w4	0	(omitted)				
Race						
AfrAm	.7642187	.1349096	5.66	0.000	.4997947	1.028643
Race#c.timew1w3w4						
AfrAm	-.0772923	.0208381	-3.71	0.000	-.1181342	-.0364504
timew1w3w4	0	(omitted)				
PovStat						
Below	-.3061292	.1442261	-2.12	0.034	-.5888186	-.0234399
PovStat#c.timew1w3w4						
Below	-.0390899	.0217772	-1.79	0.073	-.0817735	.0035936
timew1w3w4	0	(omitted)				
w1edubr						
2	.5066414	.285244	1.78	0.076	-.0524357	1.065718
3	.7484462	.2989416	2.50	0.012	.1625252	1.334367
w1edubr#c.timew1w3w4						

2	-.0287288	.0463877	-0.62	0.536	-.1196576	.0622
3	.0300696	.0483049	0.62	0.534	-.0646112	.1247504
timew1w3w4	0	(omitted)				
invmillsCES	-.0063612	.0067397	-0.94	0.345	-.0195707	.0068484
c.timew1w3w4#c.invmillsCES	.0007373	.000949	0.78	0.437	-.0011227	.0025974
timew1w3w4	0	(omitted)				
1.w1smoke	-.2614529	.1557507	-1.68	0.094	-.5678238	.044918
w1smoke#c.timew1w3w4						
1	-.0096048	.0255315	-0.38	0.707	-.0600214	.0408117
timew1w3w4	0	(omitted)				
1.w1currdrugs	-.5285316	.2062322	-2.56	0.013	-.9407506	-.1163126
w1currdrugs#c.timew1w3w4						
1	.0649366	.0320377	2.03	0.046	.0010428	.1288304
timew1w3w4	0	(omitted)				
w1hei2010_total_scorecent43	.0148128	.0061156	2.42	0.016	.0027593	.0268664
c.timew1w3w4#c.w1hei2010_total_scorecent43	-.0008492	.0010365	-0.82	0.414	-.0029024	.0012041
timew1w3w4	0	(omitted)				
w1BMIcent30	-.0129373	.0093464	-1.38	0.166	-.0312567	.005382
c.timew1w3w4#c.w1BMIcent30	.0007544	.0014327	0.53	0.599	-.0020537	.0035624
timew1w3w4	0	(omitted)				
zw1w3HCys_change	-.0210671	.0651161	-0.32	0.746	-.1486926	.1065584
c.timew1w3w4#c.zw1w3HCys_change	-.0044401	.0104181	-0.43	0.670	-.0248593	.0159791
_cons	8.870277	.2994535	29.62	0.000	8.283359	9.457196

Random-effects parameters	Estimate	Std. err.	[95% conf. interval]	
HNDID: Unstructured				
sd(timew1w3w4)	.0812724	.040394	.0306812	.2152849
sd(_cons)	1.496607	.088223	1.333308	1.679907
corr(timew1w3w4,_cons)	.6162637	.5900592	-.8163377	.9886649
sd(Residual)	2.077397	.040912	1.998737	2.159153

```
62 .
63 .
64 . save finaldata_imputed_FINAL, replace
   file finaldata_imputed_FINAL.dta saved

65 .
66 . capture log close
```