```
      name:  <unnamed>
       log:  E:\16GBBACKUPUSB\BACKUP_USB_SEPTEMBER2014\May Baydoun_folder\HANDLS_PAPER64_HCYDEPANXIETY_LONG\OUTPU
  log type:  smcl
 opened on:  21 Jun 2024, 09:13:24

. 
. 
. //////STEP 19A: TRAJECTORY OF HCY BETWEEN WAVES 1 AND 3//////////////////
> 
. use HANDLS_PAPER64_HCYDEPANXIETY_LONG,clear

. 
. keep if HNDwave==1
(8,359 observations deleted)

. save HANDLS_PAPER64_HCYDEPANXIETY_LONG_wide, replace
file HANDLS_PAPER64_HCYDEPANXIETY_LONG_wide.dta saved

. 
. capture drop sampleHCY

. gen sampleHCY=.
(3,720 missing values generated)

. replace sampleHCY=1 if (w1HCys~=. & w1Age~=. & w3Age~=. | w3HCys~=. & w1Age~=. & w3Age~=. |w4HCys~=. & w1Age~=.
(1,573 real changes made)

. replace sampleHCY=0 if sampleHCY~=1
(2,147 real changes made)

. 
. tab sampleHCY

  sampleHCY |      Freq.     Percent        Cum.
------------+-----------------------------------
          0 |      2,147       57.72       57.72
          1 |      1,573       42.28      100.00
------------+-----------------------------------
      Total |      3,720      100.00

. tab sampleHCY if HNDwave==1

  sampleHCY |      Freq.     Percent        Cum.
------------+-----------------------------------
          0 |      2,147       57.72       57.72
          1 |      1,573       42.28      100.00
------------+-----------------------------------
      Total |      3,720      100.00

. tab sampleHCY if HNDwave==3
no observations
```

```
17 . tab sampleHCY if HNDwave==4
no observations

18 .
19 .
20 . su w1Age if sampleHCY==1 & HNDwave==1
```

Variable	Obs	Mean	Std. dev.	Min	Max
w1Age	**1,573**	**47.86313**	**9.124377**	**30.1**	**66.2**

```
21 . su w3Age if sampleHCY==1 & HNDwave==1
```

Variable	Obs	Mean	Std. dev.	Min	Max
w3Age	**1,542**	**52.53502**	**9.0934**	**32.9**	**70.8**

```
22 . su w4Age if sampleHCY==1 & HNDwave==1
```

Variable	Obs	Mean	Std. dev.	Min	Max
w4Age	**1,336**	**56.23024**	**9.150943**	**36.4**	**76**

```
23 .
24 .
25 . su w1HCys if sampleHCY==1 & HNDwave==1
```

Variable	Obs	Mean	Std. dev.	Min	Max
w1HCys	**1,457**	**9.177152**	**5.22321**	**2.88**	**112.59**

```
26 . su w3HCys if sampleHCY==1 & HNDwave==1
```

Variable	Obs	Mean	Std. dev.	Min	Max
w3HCys	**1,486**	**10.40221**	**10.36594**	**3.87**	**303.93**

```
27 . su w4HCys if sampleHCY==1 & HNDwave==1
```

Variable	Obs	Mean	Std. dev.	Min	Max
w4HCys	**1,280**	**10.68614**	**4.557427**	**4.18**	**53.11**

```
28 .
29 .
30 . **Log transformation of HCY***
31 .
32 . capture drop Lnw1HCys Lnw3HCys  Lnw4HCys

33 . foreach x of varlist w1HCys w3HCys  w4HCys {
  2. gen Ln`x'=ln(`x')
  3. }
(2,260 missing values generated)
(2,234 missing values generated)
(2,440 missing values generated)
```

```
34 .
35 . save HANDLS_PAPER64_HCYDEPANXIETY_LONG_wide, replace
   file HANDLS_PAPER64_HCYDEPANXIETY_LONG_wide.dta saved

36 .
37 . **w1w3HCysTRAJ**
38 . capture drop _traj*

39 .
40 . **One group**
41 . traj if sampleHCY==1, var(Lnw1HCys Lnw3HCys  Lnw4HCys) indep(w1Age w3Age w4Age) model(cnorm) max1(400) order(3)

   ==== traj stata plugin ====  Jones BL  Nagin DS,  build: May  2 2023

   3720 observations read.
   2147 excluded by if condition.
   1573 observations used in the trajectory model.

   Start
   Parameter estimates

       2.22926,    0.00000,    0.00000,    0.00000,    0.35084

                 Neg. Log       Percent
                 Likelihood     Decrease


        0        1568.8941220
   too big of a step
   too big of a step
   too big of a step
   too big of a step
   too big of a step
   too big of a step
   too big of a step
   too big of a step
   too big of a step
   too big of a step
   too big of a step
   too big of a step
   too big of a step
   too big of a step
   too big of a step
   too big of a step
   too big of a step
        1        1545.0477017   1.51995090
        2        1527.3809969   1.14344073
        3        1494.6645372   2.14199730
        4        1483.0038045   0.78015717
        5        1481.9609645   0.07031945
        6        1477.3835008   0.30887883
        7        1477.0734430   0.02098695
        8        1477.0120946   0.00415337
        9        1476.9684692   0.00295362
       10        1476.9455740   0.00155015
       11        1461.1525291   1.06930446
       12        1450.9154920   0.70061386
       13        1450.7821486   0.00919029
       14        1450.6714133   0.00763280
       15        1450.5790863   0.00636443
       16        1450.5771651   0.00013244
       17        1447.3172631   0.22473138
       18        1446.9479521   0.02551694
       19        1445.3624867   0.10957308
```

```
      20        1444.8357102   0.03644598
      21        1444.4404822   0.02735452
      22        1444.4238003   0.00115490
      23        1444.4236101   0.00001317
      24        1443.8006184   0.04313082
      25        1443.5872917   0.01477535
      26        1443.5211383   0.00458257
      27        1443.5207152   0.00002932
      28        1443.5207109   0.00000029
      29        1443.5207109   0.00000000
                        Maximum Likelihood Estimates
                        Model: Censored Normal (cnorm)

                                 Standard       T for H0:
    Group   Parameter        Estimate        Error     Parameter=0   Prob > |T|

    1       Intercept         0.88919      0.56267           1.580       0.1141
            Linear            0.05857      0.03390           1.728       0.0841
            Quadratic        -0.00090      0.00067          -1.352       0.1765
            Cubic             0.00001      0.00000           1.226       0.2202

    1       Sigma             0.34058      0.00371          91.859       0.0000

     Group membership
    1       (%)             100.00000      0.00000
    BIC= -1464.39 (N=4223)  BIC= -1461.92 (N=1573)  AIC= -1448.52  ll=  -1443.52

   Parameter estimates

      0.88919,    0.05857,   -0.00090,    0.00001,    0.34058


    Entropy =     .

42 . trajplot, xtitle(Age (years)) ytitle(HCY) ci

43 . graph save "FIGURES2_1A.gph",replace
   file FIGURES2_1A.gph saved

44 .
45 .
46 . traj if sampleHCY==1, var(Lnw1HCys Lnw3HCys  Lnw4HCys) indep(w1Age w3Age w4Age) model(cnorm) max1(400) order(2)

   ==== traj stata plugin ====  Jones BL  Nagin DS,  build: May  2 2023

   3720 observations read.
   2147 excluded by if condition.
   1573 observations used in the trajectory model.

   Start
   Parameter estimates

      2.22926,    0.00000,    0.00000,    0.35084

               Neg. Log       Percent
               Likelihood     Decrease
```

```
     0        1568.8941220
too big of a step
too big of a step
too big of a step
too big of a step
too big of a step
too big of a step
too big of a step
too big of a step
too big of a step
too big of a step
     1        1555.5890591   0.84805359
     2        1460.2016107   6.13191818
     3        1460.2015824   0.00000194
     4        1460.2015546   0.00000191
     5        1457.2574110   0.20162584
     6        1446.9341198   0.70840547
     7        1444.2894428   0.18277798
     8        1444.2734207   0.00110934
     9        1444.2732021   0.00001514
    10        1444.2731994   0.00000018
    11        1444.2731994   0.00000000
                        Maximum Likelihood Estimates
                        Model: Censored Normal (cnorm)

                              Standard       T for H0:
 Group   Parameter        Estimate        Error     Parameter=0   Prob > |T|

 1       Intercept         1.56030      0.13080          11.928       0.0000
         Linear            0.01748      0.00514           3.400       0.0007
         Quadratic        -0.00009      0.00005          -1.738       0.0822

 1       Sigma             0.34064      0.00371          91.869       0.0000

  Group membership
 1       (%)             100.00000      0.00000
 BIC= -1460.97 (N=4223)  BIC= -1458.99 (N=1573)  AIC= -1448.27  ll=  -1444.27

Parameter estimates

    1.56030,    0.01748,   -0.00009,    0.34064


 Entropy =     .

47 . trajplot, xtitle(Age (years)) ytitle(HCY) ci

48 . graph save "FIGURES2_1B.gph",replace
   file FIGURES2_1B.gph saved
```

```
49 .
50 .
51 . traj if sampleHCY==1, var(Lnw1HCys Lnw3HCys  Lnw4HCys) indep(w1Age w3Age w4Age) model(cnorm) max1(400) order(1)

   ==== traj stata plugin ====  Jones BL  Nagin DS,  build: May  2 2023

   3720 observations read.
   2147 excluded by if condition.
   1573 observations used in the trajectory model.

   Start
   Parameter estimates

       2.22926,    0.00000,    0.35084

                 Neg. Log       Percent
                 Likelihood     Decrease


        0        1568.8941220
   too big of a step
   too big of a step
   too big of a step
   too big of a step
        1        1564.8636493   0.25689897
        2        1560.9655225   0.24910329
        3        1482.3747797   5.03475200
        4        1481.5533093   0.05541584
        5        1480.7461490   0.05448068
        6        1478.5476459   0.14847266
        7        1477.6259539   0.06233765
        8        1457.8457836   1.33864530
        9        1456.5052465   0.09195329
       10        1455.4149845   0.07485466
       11        1451.8496830   0.24496803
       12        1447.7088644   0.28520987
       13        1445.8620860   0.12756560
       14        1445.7914429   0.00488588
       15        1445.7844465   0.00048391
       16        1445.7844274   0.00000132
       17        1445.7844272   0.00000001
       18        1445.7844272   0.00000000
                          Maximum Likelihood Estimates
                          Model: Censored Normal (cnorm)

                                   Standard       T for H0:
    Group   Parameter        Estimate        Error     Parameter=0   Prob > |T|

    1       Intercept         1.78218      0.02857          62.380       0.0000
            Linear            0.00860      0.00054          15.919       0.0000

    1       Sigma             0.34076      0.00371          91.880       0.0000

     Group membership
    1       (%)             100.00000      0.00000
    BIC= -1458.31 (N=4223)  BIC= -1456.83 (N=1573)  AIC= -1448.78  ll=  -1445.78

   Parameter estimates

       1.78218,    0.00860,    0.34076
```

Entropy = .

```
52 . trajplot, xtitle(Age (years)) ytitle(HCY) ci

53 . graph save "FIGURES2_1C.gph",replace
   file FIGURES2_1C.gph saved

54 .
55 .
56 . **Two groups**
57 . traj if sampleHCY==1, var(Lnw1HCys Lnw3HCys  Lnw4HCys) indep(w1Age w3Age w4Age) model(cnorm) max1(400) order(3

   ==== traj stata plugin ====  Jones BL  Nagin DS,  build: May  2 2023

   3720 observations read.
   2147 excluded by if condition.
   1573 observations used in the trajectory model.

   Start
   Parameter estimates

       1.99536,    0.00000,    0.00000,    0.00000,    2.46315,    0.00000,
       0.00000,    0.00000,    0.35084,    0.35084,   50.00000,   50.00000


                  Neg. Log       Percent
                  Likelihood     Decrease


        0        1438.5629082
   too big of a step
   too big of a step
   too big of a step
   too big of a step
   too big of a step
   too big of a step
   too big of a step
   too big of a step
   too big of a step
   too big of a step
   too big of a step
   too big of a step
        1        1373.0696818   4.55268421
        2        1370.7156726   0.17144135
        3        1370.6275006   0.00643255
        4        1370.6263538   0.00008367
        5        1370.6239940   0.00017217
        6        1370.6213933   0.00018974
        7        1339.1021053   2.29963490
        8        1329.9129691   0.68621625
        9        1328.7713713   0.08584003
       10        1326.1058365   0.20060147
       11        1325.9893975   0.00878052
       12        1325.9888673   0.00003999
       13        1325.9878075   0.00007992
       14        1325.9868018   0.00007585
       15        1311.3709065   1.10226552
       16        1310.9495753   0.03212907
       17        1310.9472927   0.00017411
       18        1310.9472273   0.00000499
       19        1310.9471345   0.00000708
       20        1310.9470606   0.00000564
       21        1310.9469308   0.00000990
```

22	1309.7614955	0.09042588
23	1309.7613848	0.00000845
24	1309.7610719	0.00002389
25	1309.7610345	0.00000286
26	1309.7610311	0.00000026
27	1309.7610266	0.00000034
28	1226.2625991	6.37508872
29	982.6298524	19.86790977
30	964.4757287	1.84750378
31	954.3662822	1.04818050
32	950.9072080	0.36244724
33	944.7133044	0.65136782
34	943.3313839	0.14627935
35	942.4277262	0.09579430
36	941.9615025	0.04947050
37	941.7954612	0.01762719
38	941.6767190	0.01260807
39	941.6266618	0.00531576
40	941.5920307	0.00367779
41	941.5512624	0.00432972
42	886.5451178	5.84207645
43	885.0373158	0.17007618
44	884.7423937	0.03332313
45	884.4962918	0.02781621
46	884.4817316	0.00164616
47	884.4769438	0.00054131
48	884.4760163	0.00010487
49	884.4754238	0.00006699
50	877.3720090	0.80312178
51	872.8276212	0.51795450
52	863.9449124	1.01769337
53	862.2420048	0.19710835
54	816.6800601	5.28412493
55	813.7236178	0.36200740
56	810.8254647	0.35615939
57	810.1611519	0.08193044
58	810.1571498	0.00049399
59	810.1160062	0.00507847
60	810.1104299	0.00068833
61	810.1087889	0.00020257
62	810.1084720	0.00003912
63	810.1084680	0.00000049
64	810.1084677	0.00000004
65	810.1084677	0.00000000

Maximum Likelihood Estimates
Model: Censored Normal (cnorm)

Group	Parameter	Estimate	Standard Error	T for H0: Parameter=0	Prob > |T|
1	Intercept	1.43025	0.47232	3.028	0.0025
	Linear	0.02244	0.02856	0.786	0.4321
	Quadratic	-0.00025	0.00056	-0.441	0.6594
	Cubic	0.00000	0.00000	0.373	0.7092
2	Intercept	0.55286	1.32089	0.419	0.6756
	Linear	0.08804	0.07991	1.102	0.2706
	Quadratic	-0.00138	0.00158	-0.874	0.3821
	Cubic	0.00001	0.00001	0.843	0.3993
1	Sigma	0.22814	0.00420	54.346	0.0000
2	Sigma	0.36732	0.01022	35.934	0.0000

```
 Group membership
1       (%)              75.44493      2.15364          35.031       0.0000
2       (%)              24.55507      2.15364          11.402       0.0000
BIC=  -856.02 (N=4223)  BIC=  -850.59 (N=1573)  AIC=  -821.11  ll=   -810.11

Parameter estimates for adding risk factors

    1.43025,    0.02244,   -0.00025,    0.00000,    0.55286,    0.08804,
   -0.00138,    0.00001,    0.22814,    0.36732,   -1.12248


Parameter estimates

    1.43025,    0.02244,   -0.00025,    0.00000,    0.55286,    0.08804,
   -0.00138,    0.00001,    0.22814,    0.36732,   75.44493,   24.55507



 Entropy = 0.721

58 . trajplot, xtitle(Age (years)) ytitle(HCY) ci

59 . graph save "FIGURES2_2A.gph",replace
file FIGURES2_2A.gph saved

60 .
61 .
62 . traj if sampleHCY==1, var(Lnw1HCys Lnw3HCys  Lnw4HCys) indep(w1Age w3Age w4Age) model(cnorm) max1(400) order(2

==== traj stata plugin ====  Jones BL  Nagin DS,  build: May  2 2023

3720 observations read.
2147 excluded by if condition.
1573 observations used in the trajectory model.

Start
Parameter estimates

    1.99536,    0.00000,    0.00000,    2.46315,    0.00000,    0.00000,
    0.35084,    0.35084,   50.00000,   50.00000

              Neg. Log       Percent
              Likelihood     Decrease


     0        1438.5629082
too big of a step
too big of a step
too big of a step
too big of a step
too big of a step
too big of a step
     1        1380.8064343   4.01487301
     2        1379.0620801   0.12632866
     3        1379.0519595   0.00073387
     4        1379.0147132   0.00270086
     5        1379.0086587   0.00043905
     6        1361.8544100   1.24395511
     7        1325.5763208   2.66387427
     8        1309.0406887   1.24742966
     9        1307.7594150   0.09787882
    10        1300.5974668   0.54765029
    11        1294.0981739   0.49971595
```

12	1294.0501186	0.00371342
13	1294.0436811	0.00049747
14	1294.0427978	0.00006826
15	1294.0426282	0.00001311
16	1294.0425448	0.00000645
17	1294.0422905	0.00001965
18	1291.5382794	0.19350304
19	1283.7455491	0.60336812
20	1283.7199663	0.00199283
21	937.4466296	26.97421134
22	902.5679440	3.72060494
23	889.5482698	1.44251458
24	882.0612856	0.84166138
25	877.5677841	0.50943189
26	875.4191128	0.24484392
27	874.2664313	0.13167196
28	873.7081655	0.06385534
29	873.3405967	0.04206997
30	862.5309981	1.23773000
31	827.5555867	4.05497442
32	827.2200935	0.04054027
33	827.2040257	0.00194239
34	827.1959909	0.00097132
35	827.1891743	0.00082406
36	827.1864449	0.00032996
37	827.1841196	0.00028111
38	827.1815405	0.00031179
39	819.1856474	0.96664308
40	814.3128476	0.59483462
41	811.6781892	0.32354375
42	810.9267403	0.09257966
43	810.5568299	0.04561576
44	810.5259974	0.00380387
45	810.5162660	0.00120063
46	810.5160215	0.00003017
47	810.5160182	0.00000040
48	810.5160182	0.00000000

Maximum Likelihood Estimates
Model: Censored Normal (cnorm)

Group	Parameter	Estimate	Standard Error	T for H0: Parameter=0	Prob > |T|
1	Intercept	1.59978	0.11239	14.235	0.0000
	Linear	0.01199	0.00439	2.730	0.0064
	Quadratic	-0.00004	0.00004	-0.935	0.3498
2	Intercept	1.62959	0.32211	5.059	0.0000
	Linear	0.02167	0.01280	1.693	0.0905
	Quadratic	-0.00005	0.00012	-0.437	0.6622
1	Sigma	0.22844	0.00418	54.660	0.0000
2	Sigma	0.36769	0.01023	35.959	0.0000
Group membership					
1	(%)	75.61579	2.12959	35.507	0.0000
2	(%)	24.38421	2.12959	11.450	0.0000

BIC= -848.08 (N=4223) BIC= -843.64 (N=1573) AIC= -819.52 ll= -810.52

Parameter estimates for adding risk factors

1.59978, 0.01199, -0.00004, 1.62959, 0.02167, -0.00005,
0.22844, 0.36769, -1.13173

```
   Parameter estimates

       1.59978,    0.01199,   -0.00004,    1.62959,    0.02167,   -0.00005,
       0.22844,    0.36769,   75.61579,   24.38421


    Entropy = 0.723

63 . trajplot, xtitle(Age (years)) ytitle(HCY) ci

64 . graph save "FIGURES2_2B.gph",replace
   file FIGURES2_2B.gph saved

65 .
66 .
67 . traj if sampleHCY==1, var(Lnw1HCys Lnw3HCys  Lnw4HCys) indep(w1Age w3Age w4Age) model(cnorm) max1(400) order(1

   ==== traj stata plugin ====  Jones BL  Nagin DS,  build: May  2 2023

   3720 observations read.
   2147 excluded by if condition.
   1573 observations used in the trajectory model.

   Start
   Parameter estimates

       1.99536,    0.00000,    2.46315,    0.00000,    0.35084,    0.35084,
      50.00000,   50.00000

                Neg. Log       Percent
                Likelihood     Decrease


        0       1438.5629082
   too big of a step
   too big of a step
        1       1394.0731910   3.09265010
        2       1390.1494281   0.28146032
        3       1389.8706244   0.02005567
        4       1389.7917926   0.00567188
        5       1389.4921952   0.02155700
        6       1389.2948986   0.01419919
        7       1387.5537989   0.12532254
        8       1383.0763143   0.32268908
        9       1380.2340883   0.20550030
       10       1333.2380905   3.40492951
       11       1213.1498793   9.00725925
       12       1000.4755745  17.53075267
       13        980.8461479   1.96200957
       14        889.4856744   9.31445504
       15        838.3147980   5.75286122
       16        837.6172429   0.08320921
       17        835.6971295   0.22923518
       18        835.4388262   0.03090873
       19        835.0793193   0.04303210
       20        834.8254049   0.03040602
       21        825.9420297   1.06409977
       22        823.3793100   0.31027839
       23        823.2060322   0.02104472
       24        822.6133665   0.07199481
       25        822.4439021   0.02060074
       26        822.4264206   0.00212555
```

```
      27         814.6908921   0.94057394
      28         812.8173520   0.22996944
      29         812.0183834   0.09829621
      30         811.0440429   0.11998995
      31         811.0128366   0.00384768
      32         811.0127313   0.00001298
      33         811.0127298   0.00000018
      34         811.0127298   0.00000001
                        Maximum Likelihood Estimates
                        Model: Censored Normal (cnorm)

                                  Standard       T for H0:
    Group   Parameter        Estimate        Error     Parameter=0   Prob > |T|

    1       Intercept         1.70129      0.02709          62.793       0.0000
            Linear            0.00792      0.00049          16.182       0.0000

    2       Intercept         1.76271      0.07611          23.160       0.0000
            Linear            0.01618      0.00153          10.586       0.0000

    1       Sigma             0.22835      0.00417          54.735       0.0000
    2       Sigma             0.36744      0.01018          36.081       0.0000

     Group membership
    1       (%)              75.54039      2.12280          35.585       0.0000
    2       (%)              24.45961      2.12280          11.522       0.0000
    BIC=  -840.23 (N=4223)  BIC=  -836.78 (N=1573)  AIC=  -818.01  ll=   -811.01

   Parameter estimates for adding risk factors

       1.70129,    0.00792,    1.76271,    0.01618,    0.22835,    0.36744,
      -1.12764

   Parameter estimates

       1.70129,    0.00792,    1.76271,    0.01618,    0.22835,    0.36744,
      75.54039,   24.45961


    Entropy = 0.723

68 . trajplot, xtitle(Age (years)) ytitle(HCY) ci

69 . graph save "FIGURES2_2C.gph",replace
   file FIGURES2_2C.gph saved

70 .
71 .
72 . **Three groups**
73 . traj if sampleHCY==1, var(Lnw1HCys Lnw3HCys  Lnw4HCys) indep(w1Age w3Age w4Age) model(cnorm) max1(400) order(3

   ==== traj stata plugin ====  Jones BL  Nagin DS,  build: May  2 2023

   3720 observations read.
   2147 excluded by if condition.
   1573 observations used in the trajectory model.

   Start
   Parameter estimates

       1.87842,    0.00000,    0.00000,    0.00000,    2.22926,    0.00000,
       0.00000,    0.00000,    2.58010,    0.00000,    0.00000,    0.00000,
       0.35084,    0.35084,    0.35084,   33.33333,   33.33333,   33.33333
```

	Neg. Log Likelihood	Percent Decrease
0	1475.1363240	
too big of a step		
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too big of a step		
too big of a step		
too big of a step		
too big of a step		
too big of a step		
too big of a step		
1	1383.6462426	6.20214416
2	1336.2598627	3.42474676
3	1333.7811415	0.18549695
4	1333.5727080	0.01562726
5	1333.5565226	0.00121369
6	1333.5517882	0.00035502
7	1333.5477908	0.00029976
8	1333.5254589	0.00167462
9	1333.4653227	0.00450956
10	1333.4632264	0.00015721
11	1333.4614244	0.00013514
12	1330.5820083	0.21593546
13	1329.0522306	0.11497057
14	1328.5474118	0.03798337
15	1328.4998200	0.00358225
16	1328.4548497	0.00338504
17	1328.1476412	0.02312525
18	1323.6421190	0.33923354
19	1315.5561547	0.61088750
20	1287.2876817	2.14878498
21	1281.3338555	0.46250937
22	1280.1781057	0.09019896
23	1278.6168704	0.12195455
24	1277.9834650	0.04953832
25	1277.9580390	0.00198954
26	1277.6971519	0.02041437
27	1277.5753570	0.00953237
28	1277.5745877	0.00006021
29	1277.5742841	0.00002376
30	1277.5732173	0.00008350
31	1277.5727269	0.00003839
32	1274.7847410	0.21822522
33	1274.7799296	0.00037743
34	1274.7791926	0.00005781
35	1274.7789284	0.00002073
36	1274.7788075	0.00000948
37	1274.7783792	0.00003360
38	1274.7779049	0.00003720
39	1264.5907613	0.79913086
40	1264.5321337	0.00463609
41	1264.5263669	0.00045604
42	1264.5253741	0.00007851
43	1264.5250818	0.00002311
44	1264.5249184	0.00001293
45	1264.5247297	0.00001492
46	1262.8372463	0.13344803

```
    47         1262.8345277   0.00021527
    48         1262.8316559   0.00022741
    49         1262.8305235   0.00008968
    50         1262.8295219   0.00007931
    51         1262.8288928   0.00004982
    52         1262.8283997   0.00003905
    53         1262.8277633   0.00005039
    54         1199.4355195   5.01986460
    55         1178.5390841   1.74218914
    56         1175.3023640   0.27463834
    57         1175.0563258   0.02093403
    58         1175.0084512   0.00407424
    59         1175.0015884   0.00058407
    60         1174.9754297   0.00222627
    61         1150.4863711   2.08421878
    62          942.4847410  18.07945190
    63          906.4092843   3.82769664
    64          899.4128265   0.77188726
    65          899.3157960   0.01078820
    66          899.2858579   0.00332898
    67          899.2584026   0.00305302
    68          899.2507974   0.00084572
    69          899.2460569   0.00052716
    70          899.2435212   0.00028198
    71          899.2416211   0.00021130
    72          899.2397527   0.00020778
    73          787.7728603  12.39568113
    74          787.7728603  -0.00000053
    74          787.7728603  -0.00000053
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    75          777.0769362   1.35774214
    76          775.6682760   0.18127681
    77          775.5819495   0.01112930
    78          775.5767383   0.00067192
    79          775.5765903   0.00001908
    80          775.5758107   0.00010053
    81          775.5754773   0.00004298
    82          775.5753147   0.00002097
    83          775.5750472   0.00003449
    84          775.5749157   0.00001695
    85          775.5746034   0.00004027
    86          775.5744589   0.00001863
    87          775.5683498   0.00078768
    88          775.5548463   0.00174112
    89          775.5420497   0.00164999
    90          775.3285851   0.02752456
    91          775.1729920   0.02006802
    92          775.1056437   0.00868817
    93          775.0081365   0.01257985
    94          774.9493360   0.00758708
    95          774.8972906   0.00671597
    96          774.8576351   0.00511752
```

97	774.8049948	0.00679355
98	774.6939222	0.01433554
99	774.5705754	0.01592201
100	774.4563276	0.01474983
101	774.3610710	0.01229980
102	774.3154822	0.00588728
103	774.2776863	0.00488120
104	774.2698010	0.00101841
105	774.2618158	0.00103132
106	774.2573341	0.00057883
107	774.2536481	0.00047608
108	774.2477714	0.00075902
109	774.0849757	0.02102630
110	774.0750586	0.00128113
111	774.0651836	0.00127572
112	774.0595211	0.00073154
113	774.0570353	0.00032113
114	774.0554666	0.00020266
115	774.0540092	0.00018828
116	774.0528434	0.00015061
117	774.0514896	0.00017489
118	774.0263099	0.00325298
119	774.0008964	0.00328328
120	773.9523034	0.00627816
121	773.8538806	0.01271691
122	773.7358303	0.01525486
123	772.9661770	0.09947236
124	772.4656110	0.06475911
125	772.4575898	0.00103838
126	772.4573812	0.00002702
127	772.4552846	0.00027142
128	772.4550262	0.00003345
129	772.4546789	0.00004496
130	772.4544823	0.00002545
131	772.4543955	0.00001123
132	772.4542967	0.00001279
133	772.2308656	0.02892483
134	772.2227635	0.00104918
135	772.2213942	0.00017733
136	772.2184991	0.00037490
137	772.2175981	0.00011667
138	772.2171799	0.00005417
139	772.2167595	0.00005443
140	772.2164291	0.00004279
141	772.2160337	0.00005121
142	771.1398321	0.13936534
143	771.0952977	0.00577515
144	771.0835679	0.00152118
145	771.0612953	0.00288848
146	771.0543320	0.00090309
147	771.0496366	0.00060896
148	771.0458411	0.00049225
149	771.0432617	0.00033453
150	771.0409095	0.00030507
151	771.0382521	0.00034465
152	687.2791232	10.86316128
153	685.4418622	0.26732385
154	685.1455404	0.04323076
155	684.9720419	0.02532288
156	684.7816674	0.02779303
157	684.6865076	0.01389638
158	684.6089055	0.01133396
159	684.5567197	0.00762271

160	684.5195812	0.00542520
161	684.4864679	0.00483745
162	684.4547654	0.00463158
163	684.4145068	0.00588185
164	684.2211321	0.02825403
165	684.1974292	0.00346422
166	684.0272173	0.02487760
167	680.1193145	0.57130808
168	652.6749235	4.03523182
169	652.2660062	0.06265253
170	652.1761598	0.01377450
171	652.1217162	0.00834799
172	652.0772906	0.00681246
173	652.0500281	0.00418087
174	652.0295581	0.00313933
175	652.0156630	0.00213106
176	652.0053025	0.00158900
177	651.9975139	0.00119455
178	651.9907736	0.00103380
179	651.9836828	0.00108756
180	613.3536061	5.92500667
181	570.4454166	6.99566922
182	568.1655107	0.39967118
183	567.8884512	0.04876387
184	567.5721513	0.05569754
185	567.5681280	0.00070886
186	567.5658616	0.00039932
187	567.5641612	0.00029958
188	567.5626864	0.00025986
189	567.5609988	0.00029734
190	542.6312529	4.39243464
191	528.2362427	2.65281627
192	510.0007087	3.45215503
193	498.9733277	2.16222857
194	491.2513239	1.54757847
195	481.0943216	2.06757759
196	473.0005951	1.68235751
197	461.2877112	2.47629370
198	457.7166266	0.77415558
199	456.5781473	0.24873016
200	456.5095640	0.01502116
201	456.4581796	0.01125593
202	456.4143523	0.00960161
203	456.3778585	0.00799576
204	456.3471174	0.00673588
205	456.3215746	0.00559724
206	456.3000040	0.00472705
207	456.2818979	0.00396804
208	456.2662990	0.00341869
209	456.2525216	0.00301958
210	456.2393482	0.00288730
211	456.2251182	0.00311898
212	456.2066873	0.00403987
213	449.0976522	1.55829261
214	443.4107700	1.26629080
215	439.4840690	0.88556734
216	438.5941143	0.20249988
217	438.4246525	0.03863751
218	438.4208623	0.00086450
219	438.3808252	0.00913212
220	438.3770428	0.00086281
221	438.3742331	0.00064092
222	438.3718066	0.00055353

223	438.3696658	0.00048835
224	438.3677786	0.00043052
225	438.3661042	0.00038195
226	438.3646187	0.00033887
227	438.3632836	0.00030457
228	438.3620629	0.00027846
229	438.3608957	0.00026627
230	438.3596892	0.00027522
231	438.3582686	0.00032408
232	438.3563054	0.00044785
233	435.5374134	0.64305953
234	434.3807267	0.26557689
235	431.8917846	0.57298630
236	429.0851975	0.64983574
237	428.4913053	0.13840892
238	427.9584116	0.12436512
239	427.4973898	0.10772582
240	427.4029137	0.02209983
241	427.3510917	0.01212485
242	427.3371951	0.00325181
243	427.3244035	0.00299332
244	427.3157678	0.00202088
245	427.3157152	0.00001231
246	427.3123360	0.00079080
247	427.3122477	0.00002065
248	427.3122337	0.00000328
249	427.3122335	0.00000005
250	427.3122335	0.00000000

Maximum Likelihood Estimates
Model: Censored Normal (cnorm)

Group	Parameter	Estimate	Standard Error	T for H0: Parameter=0	Prob > |T|
1	Intercept	1.39392	0.55589	2.508	0.0122
	Linear	0.01609	0.03319	0.485	0.6279
	Quadratic	-0.00012	0.00065	-0.190	0.8493
	Cubic	0.00000	0.00000	0.152	0.8791
2	Intercept	0.30017	0.53818	0.558	0.5771
	Linear	0.10571	0.03261	3.242	0.0012
	Quadratic	-0.00197	0.00064	-3.059	0.0022
	Cubic	0.00001	0.00000	3.156	0.0016
3	Intercept	1.39706	2.30743	0.605	0.5449
	Linear	0.03931	0.13959	0.282	0.7782
	Quadratic	-0.00041	0.00275	-0.148	0.8825
	Cubic	0.00000	0.00002	0.161	0.8725
1	Sigma	0.18704	0.00401	46.659	0.0000
2	Sigma	0.18511	0.00486	38.107	0.0000
3	Sigma	0.44943	0.01742	25.793	0.0000
Group membership					
1	(%)	41.33410	2.24909	18.378	0.0000
2	(%)	46.25777	2.21257	20.907	0.0000
3	(%)	12.40813	1.27651	9.720	0.0000

BIC= -498.27 (N=4223) BIC= -489.88 (N=1573) AIC= -444.31 ll= -427.31

Parameter estimates for adding risk factors

```
   1.39392,    0.01609,   -0.00012,    0.00000,    0.30017,    0.10571,
  -0.00197,    0.00001,    1.39706,    0.03931,   -0.00041,    0.00000,
```

```
    0.18704,    0.18511,    0.44943,    0.11254,   -1.20334


Parameter estimates

    1.39392,    0.01609,   -0.00012,    0.00000,    0.30017,    0.10571,
   -0.00197,    0.00001,    1.39706,    0.03931,   -0.00041,    0.00000,
    0.18704,    0.18511,    0.44943,   41.33410,   46.25777,   12.40813



 Entropy = 0.736

74 . trajplot, xtitle(Age (years)) ytitle(HCY) ci

75 . graph save "FIGURES2_3A.gph",replace
file FIGURES2_3A.gph saved

76 .
77 .
78 . traj if sampleHCY==1, var(Lnw1HCys Lnw3HCys  Lnw4HCys) indep(w1Age w3Age w4Age) model(cnorm) max1(400) order(2

==== traj stata plugin ====  Jones BL  Nagin DS,  build: May  2 2023

3720 observations read.
2147 excluded by if condition.
1573 observations used in the trajectory model.

Start
Parameter estimates

    1.87842,    0.00000,    0.00000,    2.22926,    0.00000,    0.00000,
    2.58010,    0.00000,    0.00000,    0.35084,    0.35084,    0.35084,
   33.33333,   33.33333,   33.33333

             Neg. Log       Percent
             Likelihood     Decrease


     0       1475.1363240
too big of a step
too big of a step
too big of a step
too big of a step
too big of a step
too big of a step
     1       1346.6109591   8.71277880
     2       1337.0560902   0.70954932
     3       1335.8996404   0.08649224
     4       1334.0012717   0.14210414
     5       1333.8363291   0.01236450
     6       1333.8326829   0.00027336
     7       1333.8040058   0.00214998
     8       1333.7976349   0.00047765
     9       1333.7811715   0.00123432
    10       1333.4477718   0.02499658
    11       1332.7725917   0.05063417
    12       1332.2101470   0.04220110
    13       1331.6773880   0.03999061
    14       1330.8245414   0.06404303
    15       1324.6553376   0.46356252
    16       1313.7557335   0.82282566
    17       1309.2517985   0.34282895
```

18	1299.0646604	0.77808853
19	1284.9565387	1.08602152
20	1268.2576171	1.29957092
21	1264.0446407	0.33218617
22	1259.3481091	0.37154792
23	1245.5469165	1.09589973
24	1244.4951410	0.08444287
25	1244.3305091	0.01322881
26	1244.2721389	0.00469089
27	1244.2663139	0.00046814
28	1244.2247897	0.00333724
29	1244.2166711	0.00065250
30	1244.2032837	0.00107597
31	1208.2332149	2.89101221
32	1207.4646165	0.06361342
33	1207.1725078	0.02419190
34	1206.6893782	0.04002159
35	1206.6444589	0.00372252
36	1206.4810374	0.01354347
37	1073.4681997	11.02485937
38	1069.7864469	0.34297735
39	1043.2648614	2.47914764
40	1042.6500529	0.05893120
41	1042.5207493	0.01240144
42	1042.3442346	0.01693153
43	1042.2959606	0.00463129
44	1042.2745077	0.00205824
45	1042.2489341	0.00245363
46	982.5445973	5.72841428
47	780.2115696	20.59275765
48	762.7423340	2.23903827
49	749.9297939	1.67979926
50	745.1800640	0.63335660
51	735.1261754	1.34918916
52	700.1344702	4.75995909
53	668.1534694	4.56783692
54	666.6163735	0.23005133
55	646.6219014	2.99939708
56	644.6318211	0.30776568
57	637.5318236	1.10140351
58	621.6428757	2.49225958
59	608.2362706	2.15664100
60	597.2825629	1.80089683
61	578.2285735	3.19011311
62	563.7389085	2.50587150
63	548.1687941	2.76193716
64	547.9094026	0.04731965
65	547.8418033	0.01233769
66	547.7957461	0.00840702
67	547.7625753	0.00605532
68	547.7332704	0.00534992
69	547.7118627	0.00390842
70	547.6929874	0.00344622
71	547.6770957	0.00290157
72	547.6610150	0.00293615
73	547.6419426	0.00348252
74	540.8084696	1.24779943
75	498.4387954	7.83450641
76	492.4790062	1.19569126
77	477.8572313	2.96901488
78	470.9269161	1.45028990
79	464.3523469	1.39609120
80	463.8211168	0.11440237

81	463.2476537	0.12363885
82	463.0607615	0.04034390
83	462.8825365	0.03848847
84	462.7721060	0.02385714
85	462.6718243	0.02166976
86	462.5886683	0.01797301
87	462.5093133	0.01715454
88	462.4318618	0.01674593
89	462.3413414	0.01957486
90	462.2187611	0.02651294
91	458.0588172	0.89999461
92	455.3900327	0.58262922
93	446.5796843	1.93468187
94	442.3323032	0.95109142
95	437.0372241	1.19708173
96	434.7130816	0.53179508
97	433.5993935	0.25618924
98	433.3387551	0.06011041
99	432.8822517	0.10534562
100	432.5380253	0.07951965
101	432.5303824	0.00176699
102	432.3389272	0.04426399
103	432.3245203	0.00333231
104	432.3024210	0.00511172
105	432.2990298	0.00078445
106	432.2982676	0.00017633
107	432.2969231	0.00031101
108	432.2969207	0.00000056
109	432.2969206	0.00000001

Maximum Likelihood Estimates
Model: Censored Normal (cnorm)

Group	Parameter	Estimate	Standard Error	T for H0: Parameter=0	Prob > |T|
1	Intercept	1.94718	0.14112	13.798	0.0000
	Linear	0.00411	0.00559	0.736	0.4615
	Quadratic	0.00006	0.00005	1.044	0.2965
2	Intercept	1.47811	0.13520	10.933	0.0000
	Linear	0.01094	0.00521	2.099	0.0359
	Quadratic	-0.00002	0.00005	-0.462	0.6439
3	Intercept	1.61906	0.54501	2.971	0.0030
	Linear	0.02258	0.02160	1.045	0.2959
	Quadratic	-0.00002	0.00021	-0.084	0.9327
1	Sigma	0.18560	0.00481	38.565	0.0000
2	Sigma	0.18691	0.00402	46.514	0.0000
3	Sigma	0.44811	0.01735	25.823	0.0000
Group membership					
1	(%)	46.30444	2.22371	20.823	0.0000
2	(%)	41.21296	2.27174	18.142	0.0000
3	(%)	12.48260	1.27648	9.779	0.0000

BIC= -490.74 (N=4223) BIC= -483.82 (N=1573) AIC= -446.30 ll= -432.30

Parameter estimates for adding risk factors

```
   1.94718,    0.00411,    0.00006,    1.47811,    0.01094,   -0.00002,
   1.61906,    0.02258,   -0.00002,    0.18560,    0.18691,    0.44811,
  -0.11648,   -1.31090
```

```
   Parameter estimates

       1.94718,    0.00411,    0.00006,    1.47811,    0.01094,   -0.00002,
       1.61906,    0.02258,   -0.00002,    0.18560,    0.18691,    0.44811,
      46.30444,   41.21296,   12.48260


    Entropy = 0.736

79 . trajplot, xtitle(Age (years)) ytitle(HCY) ci

80 . graph save "FIGURES2_3B.gph",replace
   file FIGURES2_3B.gph saved

81 .
82 .
83 .
84 . traj if sampleHCY==1, var(Lnw1HCys Lnw3HCys  Lnw4HCys) indep(w1Age w3Age w4Age) model(cnorm) max1(400) order(1

   ==== traj stata plugin ====  Jones BL  Nagin DS,  build: May  2 2023

   3720 observations read.
   2147 excluded by if condition.
   1573 observations used in the trajectory model.

   Start
   Parameter estimates

       1.87842,    0.00000,    2.22926,    0.00000,    2.58010,    0.00000,
       0.35084,    0.35084,    0.35084,   33.33333,   33.33333,   33.33333


                 Neg. Log       Percent
                 Likelihood     Decrease


        0        1475.1363240
   too big of a step
        1        1431.9129874   2.93012489
        2        1363.7745202   4.75856199
        3        1362.0891499   0.12358131
        4        1351.1472816   0.80331513
        5        1348.3372525   0.20797357
        6        1339.9616118   0.62118291
        7        1339.1427429   0.06111137
        8        1338.9267953   0.01612581
        9        1338.5080319   0.03127605
       10        1338.1363321   0.02776971
       11        1215.8903455   9.13554051
       12        1037.4525584  14.67548351
       13        1007.4906260   2.88802916
       14         959.8937898   4.72429569
       15         923.6301471   3.77788076
       16         918.6220595   0.54221785
       17         909.2512065   1.02009884
       18         908.9279875   0.03554782
       19         908.8734336   0.00600200
       20         908.6275062   0.02705849
       21         741.6607671  18.37570820
       22         709.9397328   4.27702742
       23         637.4945219  10.20441701
       24         530.9841114  16.70765895
       25         490.6072639   7.60415360
```

26	482.8626775	1.57857149
27	482.4111723	0.09350593
28	481.0636460	0.27933147
29	480.7377472	0.06774548
30	480.6950554	0.00888047
31	480.6768068	0.00379629
32	480.6521622	0.00512707
33	480.6319518	0.00420478
34	480.5996468	0.00672137
35	465.1213082	3.22063045
36	455.6796259	2.02993975
37	449.5786568	1.33887247
38	448.5743844	0.22338082
39	447.8098934	0.17042679
40	444.8019877	0.67169255
41	442.8365854	0.44186006
42	442.4657896	0.08373196
43	442.3039382	0.03657942
44	442.1520638	0.03433711
45	442.0705490	0.01843592
46	441.9887248	0.01850931
47	441.8954433	0.02110494
48	441.7686657	0.02868952
49	439.7227055	0.46312931
50	438.8115279	0.20721641
51	437.3073267	0.34278980
52	436.3124836	0.22749290
53	435.9719749	0.07804239
54	435.9454133	0.00609250
55	435.9408376	0.00104961
56	435.9393215	0.00034778
57	435.9375848	0.00039838
58	435.1944521	0.17046769
59	434.8096683	0.08841651
60	434.1104269	0.16081551
61	433.9474463	0.03754358
62	433.9405775	0.00158287
63	433.3120020	0.14485290
64	433.2231721	0.02050021
65	433.1848211	0.00885249
66	433.0900738	0.02187225
67	433.0898633	0.00004861
68	433.0891881	0.00015589
69	433.0891881	0.00000001
70	433.0891881	0.00000000

Maximum Likelihood Estimates
Model: Censored Normal (cnorm)

Group	Parameter	Estimate	Standard Error	T for H0: Parameter=0	Prob > |T|
1	Intercept	1.80458	0.03398	53.113	0.0000
	Linear	0.00990	0.00064	15.550	0.0000
2	Intercept	1.53898	0.03180	48.389	0.0000
	Linear	0.00854	0.00057	14.988	0.0000
3	Intercept	1.67676	0.12696	13.207	0.0000
	Linear	0.02054	0.00247	8.299	0.0000
1	Sigma	0.18600	0.00480	38.751	0.0000
2	Sigma	0.18702	0.00403	46.446	0.0000
3	Sigma	0.44940	0.01743	25.783	0.0000

```
 Group membership
1       (%)              46.38826      2.23474          20.758       0.0000
2       (%)              41.22277      2.28916          18.008       0.0000
3       (%)              12.38897      1.27264           9.735       0.0000
BIC=  -479.00 (N=4223)  BIC=  -473.57 (N=1573)  AIC=  -444.09  ll=   -433.09

Parameter estimates for adding risk factors

    1.80458,    0.00990,    1.53898,    0.00854,    1.67676,    0.02054,
    0.18600,    0.18702,    0.44940,   -0.11806,   -1.32024


Parameter estimates

    1.80458,    0.00990,    1.53898,    0.00854,    1.67676,    0.02054,
    0.18600,    0.18702,    0.44940,   46.38826,   41.22277,   12.38897



 Entropy = 0.735

85 . trajplot, xtitle(Age (years)) ytitle(HCY) ci

86 . graph save "FIGURE2.gph",replace
file FIGURE2.gph saved

87 .
88 . capture rename _traj_Group R_traj_GroupHCY

89 . capture rename _traj_ProbG1 R_traj_ProbG1HCY

90 . capture rename _traj_ProbG2  R_traj_ProbG2HCY

91 . capture rename _traj_ProbG3  R_traj_ProbG3HCY

92 .
93 . save, replace
file HANDLS_PAPER64_HCYDEPANXIETY_LONG_wide.dta saved

94 .
95 . corr R_traj_ProbG1HCY Lnw1HCys Lnw3HCys Lnw4HCys
(obs=1,120)

             | R_t~1HCY Lnw1HCys Lnw3HCys Lnw4HCys
-------------+------------------------------------
R_traj_~1HCY |   1.0000
    Lnw1HCys |   0.3260   1.0000
    Lnw3HCys |   0.2772   0.6856   1.0000
    Lnw4HCys |   0.2907   0.6123   0.6351   1.0000
```

```
96 . corr R_traj_ProbG2HCY Lnw1HCys Lnw3HCys Lnw4HCys
   (obs=1,120)
```

	R_t~2HCY	Lnw1HCys	Lnw3HCys	Lnw4HCys
R_traj_~2HCY	1.0000			
Lnw1HCys	-0.6435	1.0000		
Lnw3HCys	-0.6565	0.6856	1.0000	
Lnw4HCys	-0.6811	0.6123	0.6351	1.0000

```
97 . corr R_traj_ProbG3HCY Lnw1HCys Lnw3HCys Lnw4HCys
   (obs=1,120)
```

	R_t~3HCY	Lnw1HCys	Lnw3HCys	Lnw4HCys
R_traj_~3HCY	1.0000			
Lnw1HCys	0.5181	1.0000		
Lnw3HCys	0.6117	0.6856	1.0000	
Lnw4HCys	0.6299	0.6123	0.6351	1.0000

```
98 .
99 . bysort R_traj_GroupHCY: su Lnw1HCys Lnw3HCys Lnw4HCys if (sampleHCY==1 & HNDwave==1)
```

-> R_traj_GroupHCY = 1

Variable	Obs	Mean	Std. dev.	Min	Max
Lnw1HCys	700	2.249394	.1891939	1.76815	2.802754
Lnw3HCys	711	2.32834	.1921155	1.822935	2.942332
Lnw4HCys	615	2.386352	.1980258	1.682688	2.95178

-> R_traj_GroupHCY = 2

Variable	Obs	Mean	Std. dev.	Min	Max
Lnw1HCys	604	1.914547	.1915985	1.283708	2.572612
Lnw3HCys	616	1.986065	.1849721	1.353255	2.70069
Lnw4HCys	523	2.054512	.1976784	1.430311	2.703373

-> R_traj_GroupHCY = 3

Variable	Obs	Mean	Std. dev.	Min	Max
Lnw1HCys	153	2.619154	.4815178	1.05779	4.723753
Lnw3HCys	159	2.851522	.5479301	1.574847	5.716797
Lnw4HCys	142	2.873812	.3743469	1.581038	3.972365

-> R_traj_GroupHCY = .

Variable	Obs	Mean	Std. dev.	Min	Max
Lnw1HCys	0				
Lnw3HCys	0				
Lnw4HCys	0				

```
100 .
101 .
102 . capture drop w1w3w4HCysTRAJ

103 . gen w1w3w4HCysTRAJ=R_traj_ProbG3HCY
    (2,147 missing values generated)

104 .
105 . save, replace
    file HANDLS_PAPER64_HCYDEPANXIETY_LONG_wide.dta saved

106 .
107 . keep HNDID R_traj* w1w3w4HCysTRAJ

108 .
109 . save HCY_TRAJ_DATA, replace
    file HCY_TRAJ_DATA.dta saved

110 . sort HNDID

111 . save, replace
    file HCY_TRAJ_DATA.dta saved

112 .
113 . use HANDLS_PAPER64_HCYDEPANXIETY_LONG,clear

114 . capture drop _merge

115 . sort HNDID

116 . save, replace
    file HANDLS_PAPER64_HCYDEPANXIETY_LONG.dta saved

117 .
118 . merge HNDID using HCY_TRAJ_DATA
    (you are using old merge syntax; see [D] merge for new syntax)
    variable HNDID does not uniquely identify observations in the master data

119 . save HANDLS_PAPER64_HCYDEPANXIETY_LONG, replace
    file HANDLS_PAPER64_HCYDEPANXIETY_LONG.dta saved

120 .
121 .
122 . *******GBTM FOR ANXIETY******
123 .
124 . capture drop w1ANXIETY_ORD

125 . gen w1ANXIETY_ORD=w1ANXIETY-10
    (4,326 missing values generated)

126 .
```

```
127 . capture drop w4ANXIETY_ORD

128 . gen w4ANXIETY_ORD=w4ANXIETY-10
    (4,745 missing values generated)

129 .
130 . capture drop sampleANXIETY

131 . gen sampleANXIETY=1 if w1ANXIETY~=. | w4ANXIETY~=.
    (2,326 missing values generated)

132 . replace sampleANXIETY=0 if sampleANXIETY~=1
    (2,326 real changes made)

133 .
134 . tab sampleANXIETY
```

sampleANXIETY	Freq.	Percent	Cum.
0	**2,326**	**19.26**	**19.26**
1	**9,753**	**80.74**	**100.00**
Total	**12,079**	**100.00**	

```
135 .
136 . **One group**
137 .
138 . traj if sampleANXIETY==1, var(w1ANXIETY_ORD   w4ANXIETY_ORD) indep(w1Age  w4Age) model(zip) max1(10) order(3) s

    ==== traj stata plugin ====  Jones BL  Nagin DS,  build: May  2 2023

    12079 observations read.
    2326 excluded by if condition.
    9753 observations used in the trajectory model.

    Start
    Parameter estimates

       -0.05863,    0.00000,    0.00000,    0.00000

                  Neg. Log       Percent
                  Likelihood     Decrease


         0       62311.4443323
    too big of a step
    too big of a step
    too big of a step
    too big of a step
    too big of a step
    too big of a step
    too big of a step
    too big of a step
    too big of a step
    too big of a step
    too big of a step
    too big of a step
    too big of a step
    too big of a step
    too big of a step
    too big of a step
    too big of a step
    too big of a step
    too big of a step
```

1	52928.4827496	15.05816738
2	52759.0533669	0.32011003
3	52548.3995542	0.39927519
4	45652.8107913	13.12235733
5	45516.0858658	0.29948852
6	45516.0018719	0.00018454
7	45515.8077765	0.00042643
8	45515.5758603	0.00050953
9	45515.2696832	0.00067269
10	45514.8125454	0.00100436
11	44189.1572600	2.91257991
12	44189.0353104	0.00027597
13	44188.9586938	0.00017338
14	44188.9174968	0.00009323
15	44188.8761853	0.00009349
16	44188.8344176	0.00009452
17	44188.7917619	0.00009653
18	44188.7472229	0.00010079
19	44188.6989821	0.00010917
20	44188.6431450	0.00012636
21	44188.5725216	0.00015982
22	44188.4716470	0.00022828
23	44176.9613883	0.02604810
24	44176.8475759	0.00025763
25	44176.8301564	0.00003943
26	44176.8122132	0.00004062
27	44176.7942605	0.00004064
28	44176.7763159	0.00004062
29	44176.7583532	0.00004066
30	44176.7403815	0.00004068
31	44176.7223578	0.00004080
32	44176.7042570	0.00004097
33	44176.6859681	0.00004140
34	44176.6673296	0.00004219
35	44176.6479593	0.00004385
36	44176.6271494	0.00004711
37	44176.6034324	0.00005369
38	44176.5739167	0.00006681
39	44176.5327932	0.00009309
40	43975.0055626	0.45618616
41	43909.4670523	0.14903582
42	43899.4760489	0.02275364
43	43898.8375264	0.00145451
44	43898.8284250	0.00002073
45	43898.8284212	0.00000001

Maximum Likelihood Estimates
Model: Zero Inflated Poisson (zip)

Group	Parameter	Estimate	Standard Error	T for H0: Parameter=0	Prob > |T|
1	Intercept	2.28778	0.49325	4.638	0.0000
	Linear	-0.08402	0.03027	-2.776	0.0055
	Quadratic	0.00220	0.00060	3.637	0.0003
	Cubic	-0.00002	0.00000	-5.007	0.0000

Group membership			
1	(%)	100.00000	0.00000

BIC=-43918.07 (N=15087) BIC=-43917.20 (N=9753) AIC=-43902.83 ll= -43898.83

Parameter estimates

```
   2.28778,   -0.08402,    0.00220,   -0.00002


 Entropy =     .

139 . trajplot, xtitle(Age (years)) ytitle(ANXIETY) ci

140 . graph save "ANXIETY_FINAL_cubic_one.gph",replace
    file ANXIETY_FINAL_cubic_one.gph saved

141 .
142 .
143 .
144 . traj if sampleANXIETY==1, var(w1ANXIETY_ORD   w4ANXIETY_ORD) indep(w1Age  w4Age) model(zip) max1(10) order(2) s

    ==== traj stata plugin ====  Jones BL  Nagin DS,  build: May  2 2023

    12079 observations read.
    2326 excluded by if condition.
    9753 observations used in the trajectory model.

    Start
    Parameter estimates

       -0.05863,    0.00000,    0.00000

                 Neg. Log       Percent
                 Likelihood     Decrease


         0       62311.4443323
    too big of a step
    too big of a step
    too big of a step
    too big of a step
    too big of a step
    too big of a step
    too big of a step
    too big of a step
    too big of a step
    too big of a step
         1       56012.7552516  10.10839846
         2       49867.6749904  10.97085875
         3       44186.5036474  11.39249292
         4       44149.6506516   0.08340329
         5       44149.6048247   0.00010380
         6       44149.4423369   0.00036804
         7       44149.2768765   0.00037477
         8       44149.1175398   0.00036090
         9       44148.9464710   0.00038748
        10       44148.7630117   0.00041555
        11       44148.5334972   0.00051987
        12       44148.2267590   0.00069479
        13       44106.8085688   0.09381620
        14       43953.7851551   0.34693830
        15       43911.7848098   0.09555570
        16       43911.6367415   0.00033719
        17       43911.4848454   0.00034591
        18       43911.4484551   0.00008287
        19       43911.4484547   0.00000000
                           Maximum Likelihood Estimates
                           Model: Zero Inflated Poisson (zip)
```

Group	Parameter	Estimate	Standard Error	T for H0: Parameter=0	Prob > |T|
1	Intercept	-0.12351	0.11734	-1.053	0.2926
	Linear	0.06618	0.00470	14.092	0.0000
	Quadratic	-0.00082	0.00005	-17.932	0.0000

Group membership				
1	(%)	100.00000	0.00000	

BIC=-43925.88 (N=15087) BIC=-43925.23 (N=9753) AIC=-43914.45 ll= -43911.45

Parameter estimates

-0.12351, 0.06618, -0.00082

Entropy = .

```
145 . trajplot, xtitle(Age (years)) ytitle(ANXIETY) ci

146 . graph save "ANXIETY_FINAL_quadratic_one.gph",replace
    file ANXIETY_FINAL_quadratic_one.gph saved

147 .
148 .
149 . traj if sampleANXIETY==1, var(w1ANXIETY_ORD   w4ANXIETY_ORD) indep(w1Age  w4Age) model(zip) max1(10) order(1) s

    ==== traj stata plugin ====  Jones BL  Nagin DS,  build: May  2 2023

    12079 observations read.
    2326 excluded by if condition.
    9753 observations used in the trajectory model.

    Start
    Parameter estimates

       -0.05863,    0.00000

                 Neg. Log       Percent
                 Likelihood     Decrease


         0       62311.4443323
    too big of a step
    too big of a step
    too big of a step
    too big of a step
         1       53953.9821333  13.41240327
         2       47130.1826270  12.64744369
         3       46950.7947630   0.38062204
         4       46889.8643237   0.12977510
         5       44136.1773947   5.87266986
         6       44083.7476149   0.11879094
         7       44080.3240466   0.00776606
         8       44080.3181135   0.00001346
         9       44080.3181028   0.00000002
        10       44080.3181028   0.00000000
                           Maximum Likelihood Estimates
                           Model: Zero Inflated Poisson (zip)
```

```
                                Standard       T for H0:
 Group   Parameter        Estimate        Error     Parameter=0   Prob > |T|

 1       Intercept         1.92540      0.02523          76.328       0.0000
         Linear           -0.01759      0.00049         -35.902       0.0000


  Group membership
 1       (%)             100.00000      0.00000
 BIC=-44089.94 (N=15087)  BIC=-44089.50 (N=9753)  AIC=-44082.32  ll= -44080.32

Parameter estimates

    1.92540,   -0.01759


 Entropy =     .

150 . trajplot, xtitle(Age (years)) ytitle(ANXIETY) ci

151 . graph save "ANXIETY_linear_one.gph",replace
    file ANXIETY_linear_one.gph saved

152 .
153 .
154 . **Two group**
155 .
156 . traj if sampleANXIETY==1, var(w1ANXIETY_ORD   w4ANXIETY_ORD) indep(w1Age  w4Age) model(zip) max1(10) order(3 3)

    ==== traj stata plugin ====  Jones BL  Nagin DS,  build: May  2 2023

    12079 observations read.
    2326 excluded by if condition.
    9753 observations used in the trajectory model.

    Start
    Parameter estimates

       -1.05361,    0.00000,    0.00000,    0.00000,    0.43012,    0.00000,
        0.00000,    0.00000,   50.00000,   50.00000

                  Neg. Log       Percent
                  Likelihood     Decrease


         0       50512.9614674
    too big of a step
    too big of a step
    too big of a step
    too big of a step
    too big of a step
    too big of a step
    too big of a step
    too big of a step
    too big of a step
         1       38755.1506588  23.27681939
         2       38700.7615297   0.14034039
         3       38687.4864682   0.03430181
         4       38676.7987811   0.02762570
         5       38668.2476111   0.02210930
         6       38651.1949832   0.04409982
         7       38641.9209249   0.02399423
         8       33183.7613523  14.12496957
```

```
too big of a step
too big of a step
too big of a step
     9       33170.9763012   0.03852803
    10       33160.1836809   0.03253634
    11       33148.1040324   0.03642817
    12       33135.8577574   0.03694412
    13       33123.9564431   0.03591672
    14       33116.7723853   0.02168840
    15       33112.5246584   0.01282651
    16       33110.6778552   0.00557736
    17       33109.6381582   0.00314007
    18       32903.5388108   0.62247538
    19       32894.4428337   0.02764437
    20       32892.6988823   0.00530166
    21       32891.8430330   0.00260194
    22       32891.7143392   0.00039126
    23       32891.4085555   0.00092967
    24       32891.1909225   0.00066167
    25       32891.1606216   0.00009212
    26       32891.1565442   0.00001240
    27       32891.1549076   0.00000498
    28       32891.1540295   0.00000267
    29       32891.1525084   0.00000462
    30       32891.1517859   0.00000220
    31       32890.8432778   0.00093797
    32       32890.8427327   0.00000166
    33       32890.8421907   0.00000165
    34       32890.8416039   0.00000178
    35       32890.8410140   0.00000179
    36       32890.8403231   0.00000210
    37       32890.8394427   0.00000268
    38       32890.8381700   0.00000387
    39       32704.8934345   0.56533900
    40       32695.4660920   0.02882548
    41       32695.0551815   0.00125678
    42       32694.8278296   0.00069537
    43       32694.6331771   0.00059536
    44       32694.5216137   0.00034123
    45       32694.4115472   0.00033665
    46       32694.3502604   0.00018745
    47       32694.3029497   0.00014471
    48       32694.2645287   0.00011752
    49       32694.2351036   0.00009000
    50       32694.2101987   0.00007618
    51       32694.1878526   0.00006835
    52       32694.1639974   0.00007296
    53       32694.1325375   0.00009622
    54       32683.7510513   0.03175336
    55       32677.8318177   0.01811063
    56       32677.1303293   0.00214668
    57       32677.1301901   0.00000043
    58       32677.1300724   0.00000036
    59       32677.1299657   0.00000033
    60       32677.1298631   0.00000031
    61       32677.1297473   0.00000035
    62       32677.1295949   0.00000047
    63       32676.9332867   0.00060075
    64       32673.2404166   0.01130115
    65       32669.7320508   0.01073773
    66       32649.2109154   0.06281391
    67       32643.2422595   0.01828116
    68       32642.1382789   0.00338196
```

```
   69       32641.0789275   0.00324535
   70       32638.4232264   0.00813607
   71       32634.8552348   0.01093187
   72       32633.9979391   0.00262693
   73       32633.9040088   0.00028783
   74       32633.9022430   0.00000541
   75       32633.9021213   0.00000037
   76       32633.9021199   0.00000000
                     Maximum Likelihood Estimates
                     Model: Zero Inflated Poisson (zip)

                              Standard       T for H0:
Group   Parameter        Estimate        Error     Parameter=0   Prob > |T|

1       Intercept        10.22603      2.35287           4.346       0.0000
        Linear           -0.63918      0.14530          -4.399       0.0000
        Quadratic         0.01300      0.00292           4.448       0.0000
        Cubic            -0.00009      0.00002          -4.706       0.0000

2       Intercept         0.89882      0.55428           1.622       0.1049
        Linear            0.03607      0.03392           1.063       0.2876
        Quadratic        -0.00030      0.00068          -0.445       0.6566
        Cubic            -0.00000      0.00000          -0.400       0.6895


 Group membership
1       (%)              53.73192      0.59219          90.735       0.0000
2       (%)              46.26808      0.59219          78.131       0.0000
BIC=-32677.20 (N=15087)  BIC=-32675.24 (N=9753)  AIC=-32642.90  ll= -32633.90

Parameter estimates for adding risk factors

   10.22603,   -0.63918,    0.01300,   -0.00009,    0.89882,    0.03607,
   -0.00030,   -0.00000,   -0.14955

Parameter estimates

   10.22603,   -0.63918,    0.01300,   -0.00009,    0.89882,    0.03607,
   -0.00030,   -0.00000,   53.73192,   46.26808


 Entropy = 0.849

157 . trajplot, xtitle(Age (years)) ytitle(ANXIETY) ci

158 . graph save "ANXIETY_FINAL_cubic.gph",replace
    file ANXIETY_FINAL_cubic.gph saved

159 .
160 .
161 .
```

```
162 . traj if sampleANXIETY==1, var(w1ANXIETY_ORD   w4ANXIETY_ORD) indep(w1Age  w4Age) model(zip) max1(10) order(2 2)

    ==== traj stata plugin ====  Jones BL  Nagin DS,  build: May  2 2023

    12079 observations read.
    2326 excluded by if condition.
    9753 observations used in the trajectory model.

    Start
    Parameter estimates

       -1.05361,    0.00000,    0.00000,    0.43012,    0.00000,    0.00000,
       50.00000,   50.00000

                  Neg. Log       Percent
                  Likelihood     Decrease


         0       50512.9614674
    too big of a step
    too big of a step
    too big of a step
         1       36384.3823992  27.97020538
         2       36298.3708112   0.23639700
         3       36293.1472369   0.01439066
         4       36272.5301650   0.05680707
         5       36268.5488061   0.01097624
         6       36249.7346231   0.05187465
         7       36243.7977595   0.01637767
         8       36239.7325012   0.01121642
         9       36236.5660222   0.00873759
        10       36229.6118765   0.01919096
        11       33521.3602223   7.47524335
    too big of a step
    too big of a step
        12       33478.0969446   0.12906182
        13       33437.0938899   0.12247726
        14       33396.2505274   0.12214986
        15       33356.1651823   0.12002948
        16       33314.9724723   0.12349354
        17       33271.4582810   0.13061452
        18       33221.1953516   0.15106921
        19       33160.1894787   0.18363539
        20       33081.9977119   0.23580012
        21       32987.3668974   0.28604927
        22       32925.0062084   0.18904416
        23       32877.2474747   0.14505307
        24       32818.4643970   0.17879562
        25       32798.9521632   0.05945505
        26       32775.9082180   0.07025817
        27       32770.1214757   0.01765547
        28       32758.3313513   0.03597827
        29       32745.4828361   0.03922213
        30       32719.7371724   0.07862356
        31       32705.2110414   0.04439562
        32       32686.4029384   0.05750797
        33       32676.6605715   0.02980556
        34       32673.7161667   0.00901073
        35       32670.6381559   0.00942045
        36       32670.4737182   0.00050332
        37       32670.4173184   0.00017263
        38       32670.3834302   0.00010373
        39       32670.3470494   0.00011136
```

40	32670.3279259	0.00005853
41	32670.3110811	0.00005156
42	32670.2926017	0.00005656
43	32670.2694366	0.00007091
44	32666.9813312	0.01006452
45	32651.3430287	0.04787189
46	32647.6210359	0.01139920
47	32646.8804312	0.00226848
48	32646.5556367	0.00099487
49	32646.3300711	0.00069093
50	32646.1268525	0.00062249
51	32645.9931779	0.00040947
52	32645.8867048	0.00032614
53	32645.8056924	0.00024816
54	32645.7429092	0.00019232
55	32645.6928371	0.00015338
56	32645.6515947	0.00012633
57	32645.6132585	0.00011743
58	32645.5660555	0.00014459
59	32644.7478626	0.00250629
60	32644.7081899	0.00012153
61	32644.6957517	0.00003810
62	32644.6730764	0.00006946
63	32644.6553870	0.00005419
64	32644.6504024	0.00001527
65	32644.6497359	0.00000204
66	32644.6495651	0.00000052
67	32644.6494997	0.00000020
68	32644.6494862	0.00000004
69	32644.6494837	0.00000001

Maximum Likelihood Estimates
Model: Zero Inflated Poisson (zip)

Group	Parameter	Estimate	Standard Error	T for H0: Parameter=0	Prob > |T|
1	Intercept	-1.04307	0.52722	-1.978	0.0479
	Linear	0.05594	0.02096	2.669	0.0076
	Quadratic	-0.00090	0.00020	-4.434	0.0000
2	Intercept	0.70122	0.13386	5.239	0.0000
	Linear	0.04861	0.00538	9.029	0.0000
	Quadratic	-0.00056	0.00005	-10.575	0.0000
Group membership					
1	(%)	53.55884	0.59019	90.748	0.0000
2	(%)	46.44116	0.59019	78.688	0.0000

BIC=-32678.33 (N=15087) BIC=-32676.80 (N=9753) AIC=-32651.65 ll= -32644.65

Parameter estimates for adding risk factors

-1.04307, 0.05594, -0.00090, 0.70122, 0.04861, -0.00056,
-0.14259

Parameter estimates

-1.04307, 0.05594, -0.00090, 0.70122, 0.04861, -0.00056,
53.55884, 46.44116

Entropy = 0.850

```
163 . trajplot, xtitle(Age (years)) ytitle(ANXIETY) ci

164 . graph save "ANXIETY_FINAL_quadratic.gph",replace
    file ANXIETY_FINAL_quadratic.gph saved

165 .
166 .
167 . traj if sampleANXIETY==1, var(w1ANXIETY_ORD   w4ANXIETY_ORD) indep(w1Age  w4Age) model(zip) max1(10) order(1 1)

    ==== traj stata plugin ====  Jones BL  Nagin DS,  build: May  2 2023

    12079 observations read.
    2326 excluded by if condition.
    9753 observations used in the trajectory model.

    Start
    Parameter estimates

       -1.05361,    0.00000,    0.43012,    0.00000,   50.00000,   50.00000


                 Neg. Log       Percent
                 Likelihood     Decrease


          0       50512.9614674
          1       35240.3719538  30.23499132
          2       34355.9980636   2.50954755
          3       34161.1235178   0.56722132
          4       34125.1817427   0.10521251
          5       34120.7043846   0.01312039
          6       34119.1063165   0.00468357
          7       34118.1942668   0.00267313
          8       34114.6770014   0.01030906
          9       32933.1692572   3.46334144
         10       32890.0901290   0.13080772
         11       32888.2272769   0.00566387
         12       32888.1480874   0.00024078
         13       32888.0519341   0.00029236
         14       32822.4025727   0.19961462
         15       32761.4738128   0.18563163
         16       32760.2494808   0.00373711
         17       32724.1319209   0.11024812
         18       32711.4973522   0.03860933
         19       32708.5775173   0.00892602
         20       32707.0931531   0.00453815
         21       32707.0925716   0.00000178
         22       32707.0450825   0.00014520
         23       32707.0441619   0.00000281
         24       32707.0334260   0.00003282
         25       32707.0333750   0.00000016
         26       32707.0333746   0.00000000
                             Maximum Likelihood Estimates
                             Model: Zero Inflated Poisson (zip)
```

Group	Parameter	Estimate	Standard Error	T for H0: Parameter=0	Prob > |T|
1	Intercept	1.19175	0.10547	11.299	0.0000
	Linear	-0.03566	0.00204	-17.455	0.0000
2	Intercept	2.08219	0.03126	66.615	0.0000
	Linear	-0.00810	0.00061	-13.333	0.0000
Group membership					
1	(%)	53.52493	0.58830	90.983	0.0000
2	(%)	46.47507	0.58830	78.999	0.0000

BIC=-32731.09 (N=15087) BIC=-32730.00 (N=9753) AIC=-32712.03 ll= -32707.03

Parameter estimates for adding risk factors

1.19175, -0.03566, 2.08219, -0.00810, -0.14123

Parameter estimates

1.19175, -0.03566, 2.08219, -0.00810, 53.52493, 46.47507

Entropy = 0.852

```
168 . trajplot, xtitle(Age (years)) ytitle(ANXIETY) ci

169 . graph save "ANXIETY_FINAL.gph",replace
    file ANXIETY_FINAL.gph saved

170 .
171 . capture rename _traj_Group R_traj_GroupANXIETY

172 . capture rename _traj_ProbG1 R_traj_ProbG1ANXIETY

173 . capture rename _traj_ProbG2  R_traj_ProbG2ANXIETY

174 .
175 .
176 . save, replace
    file HANDLS_PAPER64_HCYDEPANXIETY_LONG.dta saved

177 .
178 . corr R_traj_ProbG1ANXIETY w1ANXIETY_ORD  w4ANXIETY_ORD
    (obs=5,334)
```

	R_traj..	w1ANXI~D	w4ANXI~D
R_t~1ANXIETY	**1.0000**		
w1ANXIETY_~D	**-0.7482**	**1.0000**	
w4ANXIETY_~D	**-0.7331**	**0.4981**	**1.0000**

```
179 . corr R_traj_ProbG2ANXIETY w1ANXIETY_ORD  w4ANXIETY_ORD
    (obs=5,334)
```

	R_traj..	w1ANXI~D	w4ANXI~D
R_t~2ANXIETY	**1.0000**		
w1ANXIETY_~D	**0.7482**	**1.0000**	
w4ANXIETY_~D	**0.7331**	**0.4981**	**1.0000**

```
180 .
181 . bysort R_traj_GroupANXIETY: su w1ANXIETY_ORD w4ANXIETY_ORD if (sampleANXIETY==1 & HNDwave==1)
```

-> R_traj_GroupANXIETY = 1

Variable	Obs	Mean	Std. dev.	Min	Max
w1ANXIETY_~D	**1,148**	**.5914634**	**.9455057**	**0**	**5**
w4ANXIETY_~D	**1,021**	**.3907933**	**.7612383**	**0**	**4**

-> R_traj_GroupANXIETY = 2

Variable	Obs	Mean	Std. dev.	Min	Max
w1ANXIETY_~D	**1,077**	**5.531105**	**2.816278**	**0**	**10**
w4ANXIETY_~D	**859**	**5.185099**	**3.069811**	**0**	**10**

-> R_traj_GroupANXIETY = .

Variable	Obs
w1ANXIETY_~D	**0**
w4ANXIETY_~D	**0**

```
182 . twoway (contour R_traj_ProbG1ANXIETY w1ANXIETY_ORD  w4ANXIETY_ORD) if (sampleANXIETY==1 & HNDwave==1)

183 . graph save "ANXIETY_PROBG1_COMPA.gph",replace
    file ANXIETY_PROBG1_COMPA.gph saved

184 . twoway (contour R_traj_ProbG2ANXIETY w1ANXIETY_ORD  w4ANXIETY_ORD) if (sampleANXIETY==1 & HNDwave==1)

185 . graph save "ANXIETY_PROBG2_COMPA.gph",replace
    file ANXIETY_PROBG2_COMPA.gph saved

186 .
187 . graph combine "ANXIETY_FINAL.gph" "ANXIETY_PROBG1_COMPA.gph" "ANXIETY_PROBG2_COMPA.gph"
```

```
188 . graph save "FIGURE3.gph",replace
    file FIGURE3.gph saved

189 .
190 . capture drop w1w4ANXIETYTRAJ

191 . gen w1w4ANXIETYTRAJ=R_traj_ProbG2ANXIETY
    (2,326 missing values generated)

192 .
193 . save, replace
    file HANDLS_PAPER64_HCYDEPANXIETY_LONG.dta saved

194 .
195 . keep HNDID R_traj* w1w4ANXIETYTRAJ

196 .
197 . save ANXIETY_TRAJ_DATA, replace
    file ANXIETY_TRAJ_DATA.dta saved

198 . sort HNDID

199 . save, replace
    file ANXIETY_TRAJ_DATA.dta saved

200 .
201 . use HANDLS_PAPER64_HCYDEPANXIETY_LONG,clear

202 . capture drop _merge

203 . sort HNDID

204 . save, replace
    file HANDLS_PAPER64_HCYDEPANXIETY_LONG.dta saved

205 .
206 . merge HNDID using ANXIETY_TRAJ_DATA
    (you are using old merge syntax; see [D] merge for new syntax)
    variable HNDID does not uniquely identify observations in the master data
    variable HNDID does not uniquely identify observations in ANXIETY_TRAJ_DATA.dta

207 . save HANDLS_PAPER64_ANXIETYDEPANXIETY_LONG, replace
    file HANDLS_PAPER64_ANXIETYDEPANXIETY_LONG.dta saved

208 .
209 .
210 . capture log close
```