Statistics/Data analysis

```
      name:  <unnamed>
       log:  /nas/longleaf/home/rayrayc/hrs_margins_final.smcl
  log type:  smcl
 opened on:  27 Nov 2022, 23:45:13

1 . * Look at all margins.

2 . margins, dydx(*)

Average marginal effects                                  Number of obs = 94,720
Model VCE: Robust

Expression: Linear prediction, predict()
dy/dx wrt:  {res:5.wave 6.wave 7.wave 8.wave 9.wave 10.wave 11.wave 12.wave 13.wave
            14.wave 2.cendiv 3.cendiv 4.cendiv 5.cendiv 6.cendiv 7.cendiv 8.cendiv
            9.cendiv 11.cendiv 2.gender 2.raracem 3.raracem 1.rahispan 1.hibp 3.hibp
            4.hibp 5.hibp 1.bmi_miss 1.smoken_new 1.smokev_new 1.smokev_miss raedyrs
            1.shltc_miss shltc_new drinkn 2.pstmem 3.pstmem 2.mstat 3.mstat 4.mstat
            5.mstat 6.mstat 7.mstat 8.mstat 1.depres 1.effort 1.sleepr 1.arthr
            3.arthr 4.arthr 5.arthr 1.heart 3.heart 4.heart 5.heart 6.heart 1.strok
            2.strok 3.strok 4.strok 5.strok 1.psych 3.psych 4.psych 5.psych 1.lung
            3.lung 4.lung 5.lung 1.diab 3.diab 4.diab 5.diab 2.slfmem 3.slfmem
            4.slfmem 5.slfmem 2.lbrf 3.lbrf 4.lbrf 5.lbrf 6.lbrf 7.lbrf loghatotb
            loghspti logearn timwlk_new puff_new 1.puffpos_new 2.puffpos_new
            3.puffpos_new 1.alzhe_new 3.alzhe_new 4.alzhe_new 7.alzhe_new
            1.demen_new 3.demen_new 4.demen_new 1.fsad 1.going 1.enlife 1.whappy
            1.cancr 3.cancr 4.cancr 5.cancr 1.phone 2.phone 9.phone 1.meds_miss
            1.meds_new 2.meds_new 9.meds_new 1.money 2.money 9.money 1.shop 2.shop
            9.shop 1.meals 2.meals 9.meals 1.map 2.map 9.map oopmdo_new agey_m
            bmi_new}
```

	Delta-method dy/dx	std. err.	z	P>|z|	[95% con	f. interval]
wave						
5	-.2935244	.0521249	-5.63	0.000	-.3956874	-.1913614
6	-.2902034	.05395	-5.38	0.000	-.3959435	-.1844633
7	-.5406542	.0557148	-9.70	0.000	-.6498531	-.4314552
8	-.5135157	.0588397	-8.73	0.000	-.6288394	-.398192
9	-.4837999	.0602962	-8.02	0.000	-.6019784	-.3656215
10	-.9190802	.0629135	-14.61	0.000	-1.042388	-.795772
11	-.8629895	.0643754	-13.41	0.000	-.9891629	-.736816
12	-.6794074	.0669131	-10.15	0.000	-.8105547	-.5482602
13	-.6172317	.0686722	-8.99	0.000	-.7518268	-.4826367
14	-.2766354	.07361	-3.76	0.000	-.4209082	-.1323625
cendiv						
2.mid atlantic	.4122437	.1199125	3.44	0.001	.1772196	.6472678
3.en central	.1101777	.1162705	0.95	0.343	-.1177083	.3380637
4.wn central	.2074715	.1266277	1.64	0.101	-.0407143	.4556573
5.s atlantic	.0550471	.1112623	0.49	0.621	-.163023	.2731172
6.es central	-.2381862	.1346767	-1.77	0.077	-.5021477	.0257754

7.ws central	-.0081542	.1255444	-0.06	0.948	-.2542167
> .2379083					
8.mountain	.1415219	.1357115	1.04	0.297	-.1244677
> .4075115					
9.pacific	.22791	.1210366	1.88	0.060	-.0093174
> .4651374					
11.not us/inc us terr	-.2086466	.4452677	-0.47	0.639	-1.081355
> .6640619					
gender					
2.female	.9436424	.0508863	18.54	0.000	.8439071
> 1.043378					
raracem					
2.black/african american	-2.425884	.0753262	-32.21	0.000	-2.573521
> -2.278247					
3.other	-1.046158	.1255933	-8.33	0.000	-1.292316
> -.7999995					
rahispan					
1.hispanic	-.3522478	.1032694	-3.41	0.001	-.554652
> -.1498435					
hibp					
1.yes	-.0049748	.0399524	-0.12	0.901	-.0832801
> .0733305					
3.disp prev record and has cond	.2418994	.4448209	0.54	0.587	-.6299335
> 1.113732					
4.disp prev record and no cond	-.2755033	.1011574	-2.72	0.006	-.4737682
> -.0772385					
5.disp prev record (dk if cond)	-.8248655	.3452431	-2.39	0.017	-1.501529
> -.1482015					
1.bmi_miss	2.015726	.2714995	7.42	0.000	1.483597
> 2.547855					
1.smoken_new	-.0824182	.0651025	-1.27	0.206	-.2100167
> .0451804					
1.smokev_new	.0000131	.0489224	0.00	1.000	-.095873
> .0958991					
1.smokev_miss	.2193511	.3123032	0.70	0.482	-.392752
> .8314542					
raedyrs	.4759107	.0086473	55.04	0.000	.4589624
> .4928591					
1.shltc_miss	-1.023968	.4371253	-2.34	0.019	-1.880718
> -.1672185					
shltc_new	.0308407	.011704	2.64	0.008	.0079014
> .0537801					
drinkn	.0504557	.0145552	3.47	0.001	.021928
> .0789833					
pstmem					
2.same	.7545503	.0969837	7.78	0.000	.5644657
> .9446349					
3.worse	.6691715	.099951	6.69	0.000	.4732711
> .8650718					
mstat					
2.married,spouse absent	.0191581	.1403965	0.14	0.891	-.256014
> .2943302					
3.partnered	-.2286802	.1016435	-2.25	0.024	-.4278979
> -.0294626					
4.separated	-.3744608	.1495331	-2.50	0.012	-.6675404
> -.0813813					
5.divorced	.0729701	.0718353	1.02	0.310	-.0678246
> .2137647					
6.separated/divorced	.0027371	.9226422	0.00	0.998	-1.805608
> 1.811083					
7.widowed	-.0021045	.0461207	-0.05	0.964	-.0924995
> .0882904					
8.never married	-.2638073	.1346727	-1.96	0.050	-.5277609
> .0001464					

```
                          depres |
                          1.yes  |   -.398158   .0446119    -8.92   0.000    -.4855958
>    -.3107202
                                 |
                          effort |
                          1.yes  |  -.1921901   .0344545    -5.58   0.000    -.2597196
>    -.1246605
                                 |
                          sleepr |
                          1.yes  |   .1260394   .0289309     4.36   0.000     .0693359
>     .1827429
                                 |
                           arthr |
                          1.yes  |    .202318   .0401227     5.04   0.000     .1236789
>     .2809571
3.disp prev record and has cond  |  -.1189112   .5872224    -0.20   0.840    -1.269846
>     1.032024
 4.disp prev record and no cond  |  -.2263444    .097349    -2.33   0.020    -.4171449
>    -.0355439
5.disp prev record (dk if cond)  |  -.1572339   .2999958    -0.52   0.600    -.7452148
>     .4307471
                                 |
                           heart |
                          1.yes  |   .0341907   .0393624     0.87   0.385    -.0429582
>     .1113397
3.disp prev record and has cond  |  -.1128856   .8908605    -0.13   0.899     -1.85894
>     1.633169
 4.disp prev record and no cond  |  -.2128443   .1247985    -1.71   0.088    -.4574448
>     .0317561
5.disp prev record (dk if cond)  |  -.3387269   .4994982    -0.68   0.498    -1.317725
>     .6402715
   6.preld prob:prev had/no new  |   .1433234   .1829967     0.78   0.434    -.2153434
>     .5019903
                                 |
                           strok |
                          1.yes  |  -.7435222   .0692361   -10.74   0.000    -.8792224
>     -.607822
       2.tia/possible stroke     |    .087421   .1389663     0.63   0.529    -.1849479
>     .3597899
3.disp prev record and has cond  |  -.8707069   .8249081    -1.06   0.291    -2.487497
>     .7460832
 4.disp prev record and no cond  |  -.9056299   .2650966    -3.42   0.001     -1.42521
>    -.3860501
5.disp prev record (dk if cond)  |   .0271442   .8393831     0.03   0.974    -1.618017
>     1.672305
                                 |
                           psych |
                          1.yes  |  -.1788346   .0540174    -3.31   0.001    -.2847067
>    -.0729624
3.disp prev record and has cond  |  -.0972782   .5659723    -0.17   0.864    -1.206564
>     1.012007
 4.disp prev record and no cond  |  -.0950656   .1159854    -0.82   0.412    -.3223928
>     .1322617
5.disp prev record (dk if cond)  |   .0949344   .3769481     0.25   0.801    -.6438704
>     .8337391
                                 |
                            lung |
                          1.yes  |   .1481199   .0553356     2.68   0.007     .0396642
>     .2565756
3.disp prev record and has cond  |   .0059443   .5276789     0.01   0.991    -1.028287
>     1.040176
 4.disp prev record and no cond  |  -.0411092   .1429768    -0.29   0.774    -.3213386
>     .2391202
5.disp prev record (dk if cond)  |  -.2724897   .4309275    -0.63   0.527    -1.117092
>     .5721127
                                 |
                            diab |
                          1.yes  |  -.2628366   .0445172    -5.90   0.000    -.3500888
>    -.1755845
3.disp prev record and has cond  |  -.3363794   .7355001    -0.46   0.647    -1.777933
>     1.105174
 4.disp prev record and no cond  |  -.3351524   .1399547    -2.39   0.017    -.6094586
```

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>    -.0608462
5.disp prev record (dk if cond) |  -.1347235   .6143411    -0.22   0.826     -1.33881
>     1.069363
                                |
                         slfmem |
                  2.very good   |   .0491388   .0693463     0.71   0.479    -.0867774
>     .1850549
                       3.good   |  -.1563491   .0702237    -2.23   0.026     -.293985
>    -.0187131
                       4.fair   |  -.4850445   .0741827    -6.54   0.000    -.6304399
>     -.339649
                       5.poor   |  -1.204001    .092203   -13.06   0.000    -1.384715
>    -1.023286
                                |
                         lbrf   |
                  2.works pt    |    .057188   .092609     0.62   0.537    -.1243222
>     .2386983
                3.unemployed    |  -.1116897   .140746    -0.79   0.427    -.3875469
>     .1641674
              4.partly retired  |   .0112274   .0616392     0.18   0.855    -.1095833
>      .132038
                  5.retired     |  -.3081704   .062698    -4.92   0.000    -.4310561
>    -.1852846
                  6.disabled    |  -.3689567   .1640447    -2.25   0.025    -.6904785
>    -.0474349
               7.not in lbrf    |  -.2834883   .0835441    -3.39   0.001    -.4472318
>    -.1197448
                                |
                   loghatotb    |   .1376415   .007406    18.59   0.000      .123126
>      .152157
                   loghspti     |  -.1137239   .0275267    -4.13   0.000    -.1676753
>    -.0597725
                   logearn      |   .0136377   .004736     2.88   0.004     .0043554
>       .02292
                  timwlk_new    |  -.0351562   .0097989    -3.59   0.000    -.0543616
>    -.0159508
                   puff_new     |   .0015301   .0001727     8.86   0.000     .0011915
>     .0018686
                                |
                  puffpos_new   |
                         1      |  -.4856602   .0759497    -6.39   0.000    -.6345188
>    -.3368016
                         2      |   -.748384   .1115784    -6.71   0.000    -.9670736
>    -.5296943
                         3      |  -.1381019   .8893663    -0.16   0.877    -1.881228
>     1.605024
                                |
                   alzhe_new    |
                         1      |  -3.650533    .271198   -13.46   0.000    -4.182071
>    -3.118994
                         3      |  -2.675352    1.80314    -1.48   0.138    -6.209441
>     .8587372
                         4      |   .2160278   .4981574     0.43   0.665    -.7603427
>     1.192398
                         7      |  -.6382225   .6842456    -0.93   0.351    -1.979319
>     .7028742
                                |
                   demen_new    |
                         1      |  -2.634694   .1955432   -13.47   0.000    -3.017952
>    -2.251436
                         3      |  -.2672574   1.817646    -0.15   0.883    -3.829778
>     3.295263
                         4      |  -1.269039   .3380003    -3.75   0.000    -1.931507
>      -.60657
                                |
                        fsad    |
                      1.yes     |   .080845   .0373092     2.17   0.030     .0077202
>     .1539697
                                |
                       going    |
                      1.yes     |  -.0929596   .0320078    -2.90   0.004    -.1556937
>    -.0302255
```

enlife					
1.yes	-.0713692	.0566967	-1.26	0.208	-.1824926
> .0397543					
whappy					
1.yes	-.0655291	.0458112	-1.43	0.153	-.1553175
> .0242592					
cancr					
1.yes	.260884	.0470351	5.55	0.000	.1686968
> .3530711					
3.disp prev record and has cond	-2.788052	1.051337	-2.65	0.008	-4.848635
> -.7274693					
4.disp prev record and no cond	-.1809247	.2050856	-0.88	0.378	-.582885
> .2210356					
5.disp prev record (dk if cond)	.3614438	.6389236	0.57	0.572	-.8908234
> 1.613711					
phone					
1.yes	-.7269894	.0834464	-8.71	0.000	-.8905413
> -.5634375					
2.can't do	-1.802971	.4068299	-4.43	0.000	-2.600343
> -1.005599					
9.don't do	-1.307356	.2262779	-5.78	0.000	-1.750853
> -.8638598					
1.meds_miss	-.0831236	.0945588	-0.88	0.379	-.2684556
> .1022083					
meds_new					
1	-.9009932	.0960127	-9.38	0.000	-1.089175
> -.7128118					
2	-2.451134	.5526838	-4.43	0.000	-3.534375
> -1.367894					
9	-.5628584	.5385242	-1.05	0.296	-1.618346
> .4926296					
money					
1.yes	-1.48171	.0730485	-20.28	0.000	-1.624883
> -1.338538					
2.can't do	-1.967298	.2337712	-8.42	0.000	-2.425481
> -1.509115					
9.don't do	-.8435905	.0708931	-11.90	0.000	-.9825384
> -.7046426					
shop					
1.yes	-.2508846	.0567092	-4.42	0.000	-.3620325
> -.1397367					
2.can't do	-.4287521	.1769923	-2.42	0.015	-.7756506
> -.0818537					
9.don't do	-.5417942	.0841055	-6.44	0.000	-.706638
> -.3769504					
meals					
1.yes	-.5847184	.0679081	-8.61	0.000	-.7178159
> -.4516209					
2.can't do	-.5243948	.1828601	-2.87	0.004	-.882794
> -.1659956					
9.don't do	-.3783146	.0629357	-6.01	0.000	-.5016664
> -.2549629					
map					
1.yes	-.5703531	.048411	-11.78	0.000	-.665237
> -.4754692					
2.can't do	-.6965826	.0859011	-8.11	0.000	-.8649456
> -.5282196					
9.don't do	-.5322553	.0463976	-11.47	0.000	-.6231929
> -.4413178					
oopmdo_new	-4.46e-06	2.14e-06	-2.09	0.037	-8.64e-06
> -2.73e-07					

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                        agey_m |  -.1955513   .0032513   -60.15   0.000    -.2019237
>    -.1891789
                       bmi_new |   .0557174   .0044212    12.60   0.000      .047052
>     .0643828
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  Note: dy/dx for factor levels is the discrete change from the base level.

3 . marginsplot

  Variables that uniquely identify margins: _deriv

4 . graph save "Graph" "/nas/longleaf/home/rayrayc/HRS/Cognition_Prediction/Graphs/margi
> ns_all.gph", as(png) replace
  option as() not allowed
  r(198);

5 .
6 . * Look at average marginal effects of age from 18 to 100.

7 . margins, dydx(agey_m) at (age = (18 (1) 100))

  Average marginal effects                                  Number of obs = 94,720
  Model VCE: Robust

  Expression: Linear prediction, predict()
  dy/dx wrt:  agey_m
  1._at:  agey_m =  18
  2._at:  agey_m =  19
  3._at:  agey_m =  20
  4._at:  agey_m =  21
  5._at:  agey_m =  22
  6._at:  agey_m =  23
  7._at:  agey_m =  24
  8._at:  agey_m =  25
  9._at:  agey_m =  26
  10._at: agey_m =  27
  11._at: agey_m =  28
  12._at: agey_m =  29
  13._at: agey_m =  30
  14._at: agey_m =  31
  15._at: agey_m =  32
  16._at: agey_m =  33
  17._at: agey_m =  34
  18._at: agey_m =  35
  19._at: agey_m =  36
  20._at: agey_m =  37
  21._at: agey_m =  38
  22._at: agey_m =  39
  23._at: agey_m =  40
  24._at: agey_m =  41
  25._at: agey_m =  42
  26._at: agey_m =  43
  27._at: agey_m =  44
  28._at: agey_m =  45
  29._at: agey_m =  46
  30._at: agey_m =  47
  31._at: agey_m =  48
  32._at: agey_m =  49
  33._at: agey_m =  50
  34._at: agey_m =  51
  35._at: agey_m =  52
  36._at: agey_m =  53
  37._at: agey_m =  54
  38._at: agey_m =  55
  39._at: agey_m =  56
  40._at: agey_m =  57
  41._at: agey_m =  58
  42._at: agey_m =  59
  43._at: agey_m =  60
  44._at: agey_m =  61
  45._at: agey_m =  62
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46._at: agey_m =  63
47._at: agey_m =  64
48._at: agey_m =  65
49._at: agey_m =  66
50._at: agey_m =  67
51._at: agey_m =  68
52._at: agey_m =  69
53._at: agey_m =  70
54._at: agey_m =  71
55._at: agey_m =  72
56._at: agey_m =  73
57._at: agey_m =  74
58._at: agey_m =  75
59._at: agey_m =  76
60._at: agey_m =  77
61._at: agey_m =  78
62._at: agey_m =  79
63._at: agey_m =  80
64._at: agey_m =  81
65._at: agey_m =  82
66._at: agey_m =  83
67._at: agey_m =  84
68._at: agey_m =  85
69._at: agey_m =  86
70._at: agey_m =  87
71._at: agey_m =  88
72._at: agey_m =  89
73._at: agey_m =  90
74._at: agey_m =  91
75._at: agey_m =  92
76._at: agey_m =  93
77._at: agey_m =  94
78._at: agey_m =  95
79._at: agey_m =  96
80._at: agey_m =  97
81._at: agey_m =  98
82._at: agey_m =  99
83._at: agey_m = 100
```

	Delta-method dy/dx	std. err.	z	P>|z|	[95% conf.	interval]
agey_m						
_at						
1	.9024971	.2266195	3.98	0.000	.4583311	1.346663
2	.8741538	.218995	3.99	0.000	.4449314	1.303376
3	.8461306	.2115006	4.00	0.000	.4315971	1.260664
4	.8184274	.204136	4.01	0.000	.4183281	1.218527
5	.7910443	.1969015	4.02	0.000	.4051245	1.176964
6	.7639811	.1897969	4.03	0.000	.3919861	1.135976
7	.737238	.1828222	4.03	0.000	.378913	1.095563
8	.7108149	.1759776	4.04	0.000	.3659053	1.055725
9	.6847119	.1692628	4.05	0.000	.3529628	1.016461
10	.6589288	.1626781	4.05	0.000	.3400856	.977772
11	.6334658	.1562233	4.05	0.000	.3272737	.9396579
12	.6083228	.1498985	4.06	0.000	.3145271	.9021185
13	.5834998	.1437037	4.06	0.000	.3018458	.8651538
14	.5589969	.1376388	4.06	0.000	.2892297	.828764
15	.5348139	.131704	4.06	0.000	.2766789	.792949
16	.510951	.1258991	4.06	0.000	.2641933	.7577088
17	.4874082	.1202243	4.05	0.000	.2517729	.7230434
18	.4641853	.1146794	4.05	0.000	.2394178	.6889528
19	.4412825	.1092646	4.04	0.000	.2271278	.6554371
20	.4186997	.1039798	4.03	0.000	.214903	.6224963
21	.3964369	.098825	4.01	0.000	.2027433	.5901304
22	.3744941	.0938004	3.99	0.000	.1906488	.5583394
23	.3528714	.0889057	3.97	0.000	.1786193	.5271234
24	.3315686	.0841412	3.94	0.000	.1666548	.4964825
25	.310586	.0795069	3.91	0.000	.1547554	.4664165
26	.2899233	.0750026	3.87	0.000	.1429208	.4369258
27	.2695806	.0706286	3.82	0.000	.1311511	.4080102

28	.249558	.0663848	3.76	0.000	.1194461	.3796699
29	.2298554	.0622713	3.69	0.000	.1078058	.351905
30	.2104729	.0582882	3.61	0.000	.0962301	.3247156
31	.1914103	.0544355	3.52	0.000	.0847187	.2981019
32	.1726678	.0507133	3.40	0.001	.0732716	.2720639
33	.1542453	.0471217	3.27	0.001	.0618885	.2466021
34	.1361428	.0436608	3.12	0.002	.0505691	.2217165
35	.1183603	.0403309	2.93	0.003	.0393131	.1974075
36	.1008979	.0371322	2.72	0.007	.0281202	.1736756
37	.0837555	.0340648	2.46	0.014	.0169897	.1505213
38	.0669331	.0311291	2.15	0.032	.0059211	.1279451
39	.0504308	.0283256	1.78	0.075	-.0050864	.1059479
40	.0342484	.0256547	1.33	0.182	-.0160339	.0845308
41	.0183861	.0231172	0.80	0.426	-.0269228	.063695
42	.0028438	.020714	0.14	0.891	-.0377549	.0434425
43	-.0123785	.0184463	-0.67	0.502	-.0485325	.0237756
44	-.0272807	.0163157	-1.67	0.095	-.059259	.0046976
45	-.0418629	.0143246	-2.92	0.003	-.0699387	-.0137872
46	-.0561251	.0124761	-4.50	0.000	-.0805778	-.0316725
47	-.0700673	.0107745	-6.50	0.000	-.091185	-.0489496
48	-.0836894	.0092263	-9.07	0.000	-.1017726	-.0656062
49	-.0969916	.0078404	-12.37	0.000	-.1123584	-.0816247
50	-.1099737	.0066295	-16.59	0.000	-.1229672	-.0969801
51	-.1226357	.0056106	-21.86	0.000	-.1336324	-.1116391
52	-.1349778	.0048042	-28.10	0.000	-.1443938	-.1255618
53	-.1469998	.0042279	-34.77	0.000	-.1552863	-.1387134
54	-.1587018	.0038842	-40.86	0.000	-.1663147	-.151089
55	-.1700838	.0037472	-45.39	0.000	-.1774281	-.1627395
56	-.1811458	.0037635	-48.13	0.000	-.1885221	-.1737694
57	-.1918877	.0038708	-49.57	0.000	-.1994743	-.1843011
58	-.2023096	.0040158	-50.38	0.000	-.2101805	-.1944387
59	-.2124115	.0041625	-51.03	0.000	-.2205698	-.2042532
60	-.2221934	.0042909	-51.78	0.000	-.2306034	-.2137833
61	-.2316552	.0043952	-52.71	0.000	-.2402696	-.2230408
62	-.240797	.0044807	-53.74	0.000	-.2495791	-.2320149
63	-.2496188	.0045636	-54.70	0.000	-.2585632	-.2406744
64	-.2581206	.0046692	-55.28	0.000	-.267272	-.2489692
65	-.2663023	.0048313	-55.12	0.000	-.2757714	-.2568332
66	-.2741641	.0050877	-53.89	0.000	-.2841358	-.2641923
67	-.2817058	.0054749	-51.45	0.000	-.2924363	-.2709752
68	-.2889274	.0060208	-47.99	0.000	-.300728	-.2771268
69	-.2958291	.0067422	-43.88	0.000	-.3090436	-.2826146
70	-.3024107	.0076446	-39.56	0.000	-.3173939	-.2874275
71	-.3086723	.0087261	-35.37	0.000	-.3257752	-.2915694
72	-.3146139	.009981	-31.52	0.000	-.3341763	-.2950516
73	-.3202355	.0114023	-28.09	0.000	-.3425836	-.2978873
74	-.325537	.0129836	-25.07	0.000	-.3509844	-.3000896
75	-.3305185	.0147193	-22.45	0.000	-.3593677	-.3016693
76	-.33518	.0166046	-20.19	0.000	-.3677244	-.3026356
77	-.3395215	.0186358	-18.22	0.000	-.376047	-.3029959
78	-.3435429	.0208101	-16.51	0.000	-.38433	-.3027559
79	-.3472443	.023125	-15.02	0.000	-.3925685	-.3019201
80	-.3506257	.0255787	-13.71	0.000	-.4007591	-.3004924
81	-.3536871	.0281697	-12.56	0.000	-.4088987	-.2984755
82	-.3564284	.0308968	-11.54	0.000	-.416985	-.2958718
83	-.3588498	.0337591	-10.63	0.000	-.4250163	-.2926832

8 . marginsplot

Variables that uniquely identify margins: **agey_m**

```
9 . graph save "Graph" "/nas/longleaf/home/rayrayc/HRS/Cognition_Prediction/Graphs/margi
  > ns_age_18_100.gph", as(png)  replace
  option as() not allowed
  r(198);

10.
11. * Look at average marginal effects of age from 40 to 100.

12. margins, dydx(agey_m) at (age = (40 (1) 100))

  Average marginal effects                                  Number of obs = 94,720
  Model VCE: Robust

  Expression: Linear prediction, predict()
  dy/dx wrt:  agey_m
  1._at:  agey_m =  40
  2._at:  agey_m =  41
  3._at:  agey_m =  42
  4._at:  agey_m =  43
  5._at:  agey_m =  44
  6._at:  agey_m =  45
  7._at:  agey_m =  46
  8._at:  agey_m =  47
  9._at:  agey_m =  48
  10._at: agey_m =  49
  11._at: agey_m =  50
  12._at: agey_m =  51
  13._at: agey_m =  52
  14._at: agey_m =  53
  15._at: agey_m =  54
  16._at: agey_m =  55
  17._at: agey_m =  56
  18._at: agey_m =  57
  19._at: agey_m =  58
  20._at: agey_m =  59
  21._at: agey_m =  60
  22._at: agey_m =  61
  23._at: agey_m =  62
  24._at: agey_m =  63
  25._at: agey_m =  64
  26._at: agey_m =  65
  27._at: agey_m =  66
  28._at: agey_m =  67
  29._at: agey_m =  68
  30._at: agey_m =  69
  31._at: agey_m =  70
  32._at: agey_m =  71
  33._at: agey_m =  72
  34._at: agey_m =  73
  35._at: agey_m =  74
  36._at: agey_m =  75
  37._at: agey_m =  76
  38._at: agey_m =  77
  39._at: agey_m =  78
  40._at: agey_m =  79
  41._at: agey_m =  80
  42._at: agey_m =  81
  43._at: agey_m =  82
  44._at: agey_m =  83
  45._at: agey_m =  84
  46._at: agey_m =  85
  47._at: agey_m =  86
  48._at: agey_m =  87
  49._at: agey_m =  88
  50._at: agey_m =  89
  51._at: agey_m =  90
  52._at: agey_m =  91
  53._at: agey_m =  92
  54._at: agey_m =  93
  55._at: agey_m =  94
  56._at: agey_m =  95
  57._at: agey_m =  96
```

58._at: agey_m = **97**
59._at: agey_m = **98**
60._at: agey_m = **99**
61._at: agey_m = **100**

	dy/dx	Delta-method std. err.	z	P>|z|	[95% conf.	interval]
agey_m						
_at						
1	.3528714	.0889057	3.97	0.000	.1786193	.5271234
2	.3315686	.0841412	3.94	0.000	.1666548	.4964825
3	.310586	.0795069	3.91	0.000	.1547554	.4664165
4	.2899233	.0750026	3.87	0.000	.1429208	.4369258
5	.2695806	.0706286	3.82	0.000	.1311511	.4080102
6	.249558	.0663848	3.76	0.000	.1194461	.3796699
7	.2298554	.0622713	3.69	0.000	.1078058	.351905
8	.2104729	.0582882	3.61	0.000	.0962301	.3247156
9	.1914103	.0544355	3.52	0.000	.0847187	.2981019
10	.1726678	.0507133	3.40	0.001	.0732716	.2720639
11	.1542453	.0471217	3.27	0.001	.0618885	.2466021
12	.1361428	.0436608	3.12	0.002	.0505691	.2217165
13	.1183603	.0403309	2.93	0.003	.0393131	.1974075
14	.1008979	.0371322	2.72	0.007	.0281202	.1736756
15	.0837555	.0340648	2.46	0.014	.0169897	.1505213
16	.0669331	.0311291	2.15	0.032	.0059211	.1279451
17	.0504308	.0283256	1.78	0.075	-.0050864	.1059479
18	.0342484	.0256547	1.33	0.182	-.0160339	.0845308
19	.0183861	.0231172	0.80	0.426	-.0269228	.063695
20	.0028438	.020714	0.14	0.891	-.0377549	.0434425
21	-.0123785	.0184463	-0.67	0.502	-.0485325	.0237756
22	-.0272807	.0163157	-1.67	0.095	-.059259	.0046976
23	-.0418629	.0143246	-2.92	0.003	-.0699387	-.0137872
24	-.0561251	.0124761	-4.50	0.000	-.0805778	-.0316725
25	-.0700673	.0107745	-6.50	0.000	-.091185	-.0489496
26	-.0836894	.0092263	-9.07	0.000	-.1017726	-.0656062
27	-.0969916	.0078404	-12.37	0.000	-.1123584	-.0816247
28	-.1099737	.0066295	-16.59	0.000	-.1229672	-.0969801
29	-.1226357	.0056106	-21.86	0.000	-.1336324	-.1116391
30	-.1349778	.0048042	-28.10	0.000	-.1443938	-.1255618
31	-.1469998	.0042279	-34.77	0.000	-.1552863	-.1387134
32	-.1587018	.0038842	-40.86	0.000	-.1663147	-.151089
33	-.1700838	.0037472	-45.39	0.000	-.1774281	-.1627395
34	-.1811458	.0037635	-48.13	0.000	-.1885221	-.1737694
35	-.1918877	.0038708	-49.57	0.000	-.1994743	-.1843011
36	-.2023096	.0040158	-50.38	0.000	-.2101805	-.1944387
37	-.2124115	.0041625	-51.03	0.000	-.2205698	-.2042532
38	-.2221934	.0042909	-51.78	0.000	-.2306034	-.2137833
39	-.2316552	.0043952	-52.71	0.000	-.2402696	-.2230408
40	-.240797	.0044807	-53.74	0.000	-.2495791	-.2320149
41	-.2496188	.0045636	-54.70	0.000	-.2585632	-.2406744
42	-.2581206	.0046692	-55.28	0.000	-.267272	-.2489692
43	-.2663023	.0048313	-55.12	0.000	-.2757714	-.2568332
44	-.2741641	.0050877	-53.89	0.000	-.2841358	-.2641923
45	-.2817058	.0054749	-51.45	0.000	-.2924363	-.2709752
46	-.2889274	.0060208	-47.99	0.000	-.300728	-.2771268
47	-.2958291	.0067422	-43.88	0.000	-.3090436	-.2826146
48	-.3024107	.0076446	-39.56	0.000	-.3173939	-.2874275
49	-.3086723	.0087261	-35.37	0.000	-.3257752	-.2915694
50	-.3146139	.009981	-31.52	0.000	-.3341763	-.2950516
51	-.3202355	.0114023	-28.09	0.000	-.3425836	-.2978873
52	-.325537	.0129836	-25.07	0.000	-.3509844	-.3000896
53	-.3305185	.0147193	-22.45	0.000	-.3593677	-.3016693
54	-.33518	.0166046	-20.19	0.000	-.3677244	-.3026356
55	-.3395215	.0186358	-18.22	0.000	-.376047	-.3029959
56	-.3435429	.0208101	-16.51	0.000	-.38433	-.3027559
57	-.3472443	.023125	-15.02	0.000	-.3925685	-.3019201
58	-.3506257	.0255787	-13.71	0.000	-.4007591	-.3004924
59	-.3536871	.0281697	-12.56	0.000	-.4088987	-.2984755
60	-.3564284	.0308968	-11.54	0.000	-.416985	-.2958718
61	-.3588498	.0337591	-10.63	0.000	-.4250163	-.2926832

```
13. marginsplot

  Variables that uniquely identify margins: agey_m

14. graph save "Graph" "/nas/longleaf/home/rayrayc/HRS/Cognition_Prediction/Graphs/margi
  > ns_age_40_100.gph", as(png) replace
  option as() not allowed
  r(198);

15.
16. * Look at average marginal effects of having high blood pressure at ages 40 through
  > 100.

17. *margins, dydx(hibp) at (age = (40 (1) 100))

18. *marginsplot

19. *graph save "Graph" "/nas/longleaf/home/rayrayc/HRS/Cognition_Prediction/Graphs/marg
  > ins_hibp_40_100.gph", as(png)  replace

20.
21. * Look at average marginal effects of bmi from 40 through 100.

22. margins, dydx(bmi_new) at (bmi_new = (1 (1) 100))

  Average marginal effects                                  Number of obs = 94,720
  Model VCE: Robust

  Expression: Linear prediction, predict()
  dy/dx wrt:  bmi_new
  1._at:   bmi_new =   1
  2._at:   bmi_new =   2
  3._at:   bmi_new =   3
  4._at:   bmi_new =   4
  5._at:   bmi_new =   5
  6._at:   bmi_new =   6
  7._at:   bmi_new =   7
  8._at:   bmi_new =   8
  9._at:   bmi_new =   9
  10._at:  bmi_new =  10
  11._at:  bmi_new =  11
  12._at:  bmi_new =  12
  13._at:  bmi_new =  13
  14._at:  bmi_new =  14
  15._at:  bmi_new =  15
  16._at:  bmi_new =  16
  17._at:  bmi_new =  17
  18._at:  bmi_new =  18
  19._at:  bmi_new =  19
  20._at:  bmi_new =  20
  21._at:  bmi_new =  21
  22._at:  bmi_new =  22
  23._at:  bmi_new =  23
  24._at:  bmi_new =  24
  25._at:  bmi_new =  25
  26._at:  bmi_new =  26
  27._at:  bmi_new =  27
  28._at:  bmi_new =  28
  29._at:  bmi_new =  29
  30._at:  bmi_new =  30
  31._at:  bmi_new =  31
  32._at:  bmi_new =  32
  33._at:  bmi_new =  33
  34._at:  bmi_new =  34
  35._at:  bmi_new =  35
  36._at:  bmi_new =  36
  37._at:  bmi_new =  37
  38._at:  bmi_new =  38
  39._at:  bmi_new =  39
  40._at:  bmi_new =  40
```

41._at: bmi_new = **41**
42._at: bmi_new = **42**
43._at: bmi_new = **43**
44._at: bmi_new = **44**
45._at: bmi_new = **45**
46._at: bmi_new = **46**
47._at: bmi_new = **47**
48._at: bmi_new = **48**
49._at: bmi_new = **49**
50._at: bmi_new = **50**
51._at: bmi_new = **51**
52._at: bmi_new = **52**
53._at: bmi_new = **53**
54._at: bmi_new = **54**
55._at: bmi_new = **55**
56._at: bmi_new = **56**
57._at: bmi_new = **57**
58._at: bmi_new = **58**
59._at: bmi_new = **59**
60._at: bmi_new = **60**
61._at: bmi_new = **61**
62._at: bmi_new = **62**
63._at: bmi_new = **63**
64._at: bmi_new = **64**
65._at: bmi_new = **65**
66._at: bmi_new = **66**
67._at: bmi_new = **67**
68._at: bmi_new = **68**
69._at: bmi_new = **69**
70._at: bmi_new = **70**
71._at: bmi_new = **71**
72._at: bmi_new = **72**
73._at: bmi_new = **73**
74._at: bmi_new = **74**
75._at: bmi_new = **75**
76._at: bmi_new = **76**
77._at: bmi_new = **77**
78._at: bmi_new = **78**
79._at: bmi_new = **79**
80._at: bmi_new = **80**
81._at: bmi_new = **81**
82._at: bmi_new = **82**
83._at: bmi_new = **83**
84._at: bmi_new = **84**
85._at: bmi_new = **85**
86._at: bmi_new = **86**
87._at: bmi_new = **87**
88._at: bmi_new = **88**
89._at: bmi_new = **89**
90._at: bmi_new = **90**
91._at: bmi_new = **91**
92._at: bmi_new = **92**
93._at: bmi_new = **93**
94._at: bmi_new = **94**
95._at: bmi_new = **95**
96._at: bmi_new = **96**
97._at: bmi_new = **97**
98._at: bmi_new = **98**
99._at: bmi_new = **99**
100._at: bmi_new = **100**

	dy/dx	Delta-method std. err.	z	P>|z|	[95% conf.	interval]
bmi_new						
_at						
1	.1391965	.0144427	9.64	0.000	.1108894	.1675036
2	.1359789	.0140042	9.71	0.000	.1085312	.1634267
3	.1327614	.0135669	9.79	0.000	.1061707	.159352
4	.1295438	.0131308	9.87	0.000	.1038078	.1552798
5	.1263262	.0126962	9.95	0.000	.1014421	.1512103
6	.1231086	.0122631	10.04	0.000	.0990734	.1471439
7	.1198911	.0118317	10.13	0.000	.0967013	.1430808
8	.1166735	.0114023	10.23	0.000	.0943254	.1390215
9	.1134559	.010975	10.34	0.000	.0919454	.1349664
10	.1102383	.01055	10.45	0.000	.0895606	.1309161
11	.1070208	.0101278	10.57	0.000	.0871706	.126871
12	.1038032	.0097087	10.69	0.000	.0847745	.1228319
13	.1005856	.009293	10.82	0.000	.0823717	.1187996
14	.097368	.0088813	10.96	0.000	.0799611	.114775
15	.0941505	.0084741	11.11	0.000	.0775416	.1107593
16	.0909329	.0080721	11.27	0.000	.0751119	.1067539
17	.0877153	.0076762	11.43	0.000	.0726703	.1027603
18	.0844977	.0072873	11.60	0.000	.070215	.0987805
19	.0812802	.0069066	11.77	0.000	.0677436	.0948168
20	.0780626	.0065355	11.94	0.000	.0652532	.090872
21	.074845	.0061758	12.12	0.000	.0627406	.0869495
22	.0716274	.0058297	12.29	0.000	.0602015	.0830534
23	.0684099	.0054995	12.44	0.000	.057631	.0791888
24	.0651923	.0051885	12.56	0.000	.055023	.0753616
25	.0619747	.0049002	12.65	0.000	.0523704	.071579
26	.0587571	.004639	12.67	0.000	.049665	.0678493
27	.0555396	.0044094	12.60	0.000	.0468972	.0641819
28	.052322	.0042169	12.41	0.000	.044057	.060587
29	.0491044	.0040666	12.07	0.000	.041134	.0570749
30	.0458869	.0039634	11.58	0.000	.0381188	.0536549
31	.0426693	.0039109	10.91	0.000	.035004	.0503345
32	.0394517	.0039112	10.09	0.000	.0317858	.0471176
33	.0362341	.0039644	9.14	0.000	.0284641	.0440042
34	.0330166	.0040683	8.12	0.000	.0250429	.0409902
35	.029799	.0042191	7.06	0.000	.0215297	.0380683
36	.0265814	.0044121	6.02	0.000	.0179338	.035229
37	.0233638	.0046421	5.03	0.000	.0142655	.0324621
38	.0201463	.0049037	4.11	0.000	.0105351	.0297574
39	.0169287	.0051923	3.26	0.001	.0067519	.0271055
40	.0137111	.0055036	2.49	0.013	.0029242	.024498
41	.0104935	.005834	1.80	0.072	-.0009409	.0219279
42	.007276	.0061803	1.18	0.239	-.0048373	.0193892
43	.0040584	.0065402	0.62	0.535	-.0087601	.0168769
44	.0008408	.0069113	0.12	0.903	-.0127052	.0143868
45	-.0023768	.0072921	-0.33	0.744	-.0166691	.0119156
46	-.0055943	.0076812	-0.73	0.466	-.0206491	.0094604
47	-.0088119	.0080772	-1.09	0.275	-.0246429	.007019
48	-.0120295	.0084792	-1.42	0.156	-.0286484	.0045895
49	-.0152471	.0088865	-1.72	0.086	-.0326642	.0021701
50	-.0184646	.0092982	-1.99	0.047	-.0366889	-.0002404
51	-.0216822	.009714	-2.23	0.026	-.0407213	-.0026432
52	-.0248998	.0101332	-2.46	0.014	-.0447604	-.0050391
53	-.0281174	.0105554	-2.66	0.008	-.0488056	-.0074291
54	-.0313349	.0109804	-2.85	0.004	-.0528561	-.0098138
55	-.0345525	.0114077	-3.03	0.002	-.0569112	-.0121938
56	-.0377701	.0118372	-3.19	0.001	-.0609706	-.0145696
57	-.0409877	.0122686	-3.34	0.001	-.0650337	-.0169417
58	-.0442052	.0127017	-3.48	0.001	-.0691001	-.0193103
59	-.0474228	.0131364	-3.61	0.000	-.0731696	-.021676
60	-.0506404	.0135724	-3.73	0.000	-.0772419	-.0240389
61	-.053858	.0140098	-3.84	0.000	-.0813166	-.0263993
62	-.0570755	.0144483	-3.95	0.000	-.0853936	-.0287575
63	-.0602931	.0148878	-4.05	0.000	-.0894726	-.0311136
64	-.0635107	.0153283	-4.14	0.000	-.0935536	-.0334678
65	-.0667282	.0157697	-4.23	0.000	-.0976362	-.0358203
66	-.0699458	.0162119	-4.31	0.000	-.1017205	-.0381712

67	-.0731634	.0166548	-4.39	0.000	-.1058062	-.0405206
68	-.076381	.0170984	-4.47	0.000	-.1098933	-.0428687
69	-.0795985	.0175427	-4.54	0.000	-.1139815	-.0452155
70	-.0828161	.0179875	-4.60	0.000	-.118071	-.0475612
71	-.0860337	.0184329	-4.67	0.000	-.1221615	-.0499059
72	-.0892513	.0188788	-4.73	0.000	-.126253	-.0522495
73	-.0924688	.0193252	-4.78	0.000	-.1303455	-.0545922
74	-.0956864	.019772	-4.84	0.000	-.1344388	-.0569341
75	-.098904	.0202192	-4.89	0.000	-.1385329	-.0592751
76	-.1021216	.0206668	-4.94	0.000	-.1426277	-.0616154
77	-.1053391	.0211147	-4.99	0.000	-.1467233	-.063955
78	-.1085567	.021563	-5.03	0.000	-.1508195	-.066294
79	-.1117743	.0220116	-5.08	0.000	-.1549163	-.0686323
80	-.1149919	.0224606	-5.12	0.000	-.1590137	-.07097
81	-.1182094	.0229097	-5.16	0.000	-.1631117	-.0733072
82	-.121427	.0233592	-5.20	0.000	-.1672102	-.0756438
83	-.1246446	.0238089	-5.24	0.000	-.1713092	-.07798
84	-.1278622	.0242588	-5.27	0.000	-.1754086	-.0803157
85	-.1310797	.024709	-5.30	0.000	-.1795085	-.082651
86	-.1342973	.0251594	-5.34	0.000	-.1836087	-.0849859
87	-.1375149	.0256099	-5.37	0.000	-.1877094	-.0873204
88	-.1407325	.0260607	-5.40	0.000	-.1918104	-.0896545
89	-.14395	.0265116	-5.43	0.000	-.1959118	-.0919882
90	-.1471676	.0269627	-5.46	0.000	-.2000136	-.0943217
91	-.1503852	.027414	-5.49	0.000	-.2041156	-.0966548
92	-.1536028	.0278654	-5.51	0.000	-.2082179	-.0989876
93	-.1568203	.028317	-5.54	0.000	-.2123206	-.1013201
94	-.1600379	.0287687	-5.56	0.000	-.2164235	-.1036523
95	-.1632555	.0292205	-5.59	0.000	-.2205266	-.1059843
96	-.1664731	.0296725	-5.61	0.000	-.2246301	-.1083161
97	-.1696906	.0301246	-5.63	0.000	-.2287337	-.1106475
98	-.1729082	.0305768	-5.65	0.000	-.2328376	-.1129788
99	-.1761258	.0310291	-5.68	0.000	-.2369417	-.1153099
100	-.1793433	.0314815	-5.70	0.000	-.241046	-.1176407

```
23. marginsplot

  Variables that uniquely identify margins: bmi_new

24. graph save "Graph" "/nas/longleaf/home/rayrayc/HRS/Cognition_Prediction/Graphs/margi
  > ns_bmi_0_100.gph", as(png)  replace
  option as() not allowed
  r(198);

25.
26. * Look at average marginal effects of bmi from age 40 through 100.

27. margins, dydx(bmi_new) at (age = (40 (1) 100))

  Average marginal effects                                  Number of obs = 94,720
  Model VCE: Robust

  Expression: Linear prediction, predict()
  dy/dx wrt:  bmi_new
  1._at:  agey_m =  40
  2._at:  agey_m =  41
  3._at:  agey_m =  42
  4._at:  agey_m =  43
  5._at:  agey_m =  44
  6._at:  agey_m =  45
  7._at:  agey_m =  46
  8._at:  agey_m =  47
  9._at:  agey_m =  48
  10._at: agey_m =  49
  11._at: agey_m =  50
  12._at: agey_m =  51
  13._at: agey_m =  52
  14._at: agey_m =  53
  15._at: agey_m =  54
  16._at: agey_m =  55
  17._at: agey_m =  56
```

18._at: agey_m = **57**
19._at: agey_m = **58**
20._at: agey_m = **59**
21._at: agey_m = **60**
22._at: agey_m = **61**
23._at: agey_m = **62**
24._at: agey_m = **63**
25._at: agey_m = **64**
26._at: agey_m = **65**
27._at: agey_m = **66**
28._at: agey_m = **67**
29._at: agey_m = **68**
30._at: agey_m = **69**
31._at: agey_m = **70**
32._at: agey_m = **71**
33._at: agey_m = **72**
34._at: agey_m = **73**
35._at: agey_m = **74**
36._at: agey_m = **75**
37._at: agey_m = **76**
38._at: agey_m = **77**
39._at: agey_m = **78**
40._at: agey_m = **79**
41._at: agey_m = **80**
42._at: agey_m = **81**
43._at: agey_m = **82**
44._at: agey_m = **83**
45._at: agey_m = **84**
46._at: agey_m = **85**
47._at: agey_m = **86**
48._at: agey_m = **87**
49._at: agey_m = **88**
50._at: agey_m = **89**
51._at: agey_m = **90**
52._at: agey_m = **91**
53._at: agey_m = **92**
54._at: agey_m = **93**
55._at: agey_m = **94**
56._at: agey_m = **95**
57._at: agey_m = **96**
58._at: agey_m = **97**
59._at: agey_m = **98**
60._at: agey_m = **99**
61._at: agey_m = **100**

		Delta-method				
	dy/dx	std. err.	z	P>|z|	[95% conf.	interval]
bmi_new						
_at						
1	-.0109111	.005088	-2.14	0.032	-.0208834	-.0009387
2	-.0090164	.0049364	-1.83	0.068	-.0186917	.0006588
3	-.0071218	.0047882	-1.49	0.137	-.0165066	.002263
4	-.0052272	.0046438	-1.13	0.260	-.0143287	.0038744
5	-.0033325	.0045033	-0.74	0.459	-.0121589	.0054938
6	-.0014379	.0043674	-0.33	0.742	-.0099978	.007122
7	.0004568	.0042363	0.11	0.914	-.0078462	.0087598
8	.0023514	.0041106	0.57	0.567	-.0057052	.010408
9	.004246	.0039908	1.06	0.287	-.0035757	.0120678
10	.0061407	.0038773	1.58	0.113	-.0014588	.0137401
11	.0080353	.0037709	2.13	0.033	.0006445	.0154262
12	.00993	.0036721	2.70	0.007	.0027328	.0171271
13	.0118246	.0035815	3.30	0.001	.0048051	.0188441
14	.0137192	.0034997	3.92	0.000	.0068599	.0205785
15	.0156139	.0034275	4.56	0.000	.0088962	.0223316
16	.0175085	.0033653	5.20	0.000	.0109126	.0241045
17	.0194032	.0033139	5.86	0.000	.0129081	.0258983
18	.0212978	.0032736	6.51	0.000	.0148816	.027714
19	.0231924	.003245	7.15	0.000	.0168325	.0295524
20	.0250871	.0032282	7.77	0.000	.0187599	.0314142
21	.0269817	.0032235	8.37	0.000	.0206637	.0332997

22	.0288764	.003231	8.94	0.000	.0225437	.0352091
23	.030771	.0032506	9.47	0.000	.0244	.037142
24	.0326656	.003282	9.95	0.000	.0262331	.0390982
25	.0345603	.0033249	10.39	0.000	.0280436	.041077
26	.0364549	.0033789	10.79	0.000	.0298324	.0430774
27	.0383496	.0034434	11.14	0.000	.0316005	.0450986
28	.0402442	.003518	11.44	0.000	.0333491	.0471393
29	.0421388	.0036018	11.70	0.000	.0350794	.0491983
30	.0440335	.0036944	11.92	0.000	.0367926	.0512744
31	.0459281	.0037951	12.10	0.000	.0384899	.0533663
32	.0478228	.0039032	12.25	0.000	.0401726	.0554729
33	.0497174	.0040182	12.37	0.000	.0418419	.0575929
34	.051612	.0041394	12.47	0.000	.0434989	.0597252
35	.0535067	.0042664	12.54	0.000	.0451446	.0618687
36	.0554013	.0043987	12.60	0.000	.0467801	.0640226
37	.057296	.0045357	12.63	0.000	.0484061	.0661858
38	.0591906	.0046771	12.66	0.000	.0500236	.0683576
39	.0610852	.0048225	12.67	0.000	.0516333	.0705372
40	.0629799	.0049715	12.67	0.000	.0532359	.0727239
41	.0648745	.0051239	12.66	0.000	.0548319	.0749171
42	.0667692	.0052792	12.65	0.000	.056422	.0771163
43	.0686638	.0054374	12.63	0.000	.0580067	.0793209
44	.0705584	.0055981	12.60	0.000	.0595865	.0815304
45	.0724531	.0057611	12.58	0.000	.0611616	.0837445
46	.0743477	.0059262	12.55	0.000	.0627326	.0859628
47	.0762424	.0060933	12.51	0.000	.0642998	.088185
48	.078137	.0062622	12.48	0.000	.0658634	.0904106
49	.0800316	.0064327	12.44	0.000	.0674237	.0926395
50	.0819263	.0066048	12.40	0.000	.0689811	.0948715
51	.0838209	.0067783	12.37	0.000	.0705357	.0971061
52	.0857156	.0069531	12.33	0.000	.0720877	.0993434
53	.0876102	.0071291	12.29	0.000	.0736374	.101583
54	.0895048	.0073063	12.25	0.000	.0751848	.1038249
55	.0913995	.0074845	12.21	0.000	.0767302	.1060687
56	.0932941	.0076636	12.17	0.000	.0782737	.1083145
57	.0951888	.0078437	12.14	0.000	.0798154	.1105621
58	.0970834	.0080246	12.10	0.000	.0813555	.1128113
59	.098978	.0082063	12.06	0.000	.082894	.1150621
60	.1008727	.0083887	12.02	0.000	.0844311	.1173143
61	.1027673	.0085718	11.99	0.000	.0859668	.1195678

```
28. marginsplot

  Variables that uniquely identify margins: agey_m

29. graph save "Graph" "/nas/longleaf/home/rayrayc/HRS/Cognition_Prediction/Graphs/margi
  > ns_bmi_age_40_100.gph", as(png)  replace
  option as() not allowed
  r(198);

30.
31. * Look at average marginal effects of years of education at every year of education.

32. margins, dydx(raedyrs) at (raedyrs = (0(1)17))

  Average marginal effects                                  Number of obs = 94,720
  Model VCE: Robust

  Expression: Linear prediction, predict()
  dy/dx wrt:  raedyrs
  1._at:  raedyrs =  0
  2._at:  raedyrs =  1
  3._at:  raedyrs =  2
  4._at:  raedyrs =  3
  5._at:  raedyrs =  4
  6._at:  raedyrs =  5
  7._at:  raedyrs =  6
  8._at:  raedyrs =  7
  9._at:  raedyrs =  8
  10._at: raedyrs =  9
  11._at: raedyrs = 10
```

```
12._at: raedyrs = 11
13._at: raedyrs = 12
14._at: raedyrs = 13
15._at: raedyrs = 14
16._at: raedyrs = 15
17._at: raedyrs = 16
18._at: raedyrs = 17
```

	dy/dx	Delta-method std. err.	z	P>|z|	[95% conf.	interval]
raedyrs						
_at						
1	**.4759107**	**.0086473**	**55.04**	**0.000**	**.4589624**	**.4928591**
2	**.4759107**	**.0086473**	**55.04**	**0.000**	**.4589624**	**.4928591**
3	**.4759107**	**.0086473**	**55.04**	**0.000**	**.4589624**	**.4928591**
4	**.4759107**	**.0086473**	**55.04**	**0.000**	**.4589624**	**.4928591**
5	**.4759107**	**.0086473**	**55.04**	**0.000**	**.4589624**	**.4928591**
6	**.4759107**	**.0086473**	**55.04**	**0.000**	**.4589624**	**.4928591**
7	**.4759107**	**.0086473**	**55.04**	**0.000**	**.4589624**	**.4928591**
8	**.4759107**	**.0086473**	**55.04**	**0.000**	**.4589624**	**.4928591**
9	**.4759107**	**.0086473**	**55.04**	**0.000**	**.4589624**	**.4928591**
10	**.4759107**	**.0086473**	**55.04**	**0.000**	**.4589624**	**.4928591**
11	**.4759107**	**.0086473**	**55.04**	**0.000**	**.4589624**	**.4928591**
12	**.4759107**	**.0086473**	**55.04**	**0.000**	**.4589624**	**.4928591**
13	**.4759107**	**.0086473**	**55.04**	**0.000**	**.4589624**	**.4928591**
14	**.4759107**	**.0086473**	**55.04**	**0.000**	**.4589624**	**.4928591**
15	**.4759107**	**.0086473**	**55.04**	**0.000**	**.4589624**	**.4928591**
16	**.4759107**	**.0086473**	**55.04**	**0.000**	**.4589624**	**.4928591**
17	**.4759107**	**.0086473**	**55.04**	**0.000**	**.4589624**	**.4928591**
18	**.4759107**	**.0086473**	**55.04**	**0.000**	**.4589624**	**.4928591**

```
33. marginsplot

  Variables that uniquely identify margins: raedyrs

34. graph save "Graph" "/nas/longleaf/home/rayrayc/HRS/Cognition_Prediction/Graphs/margi
  > ns_raedyrs.gph", as(png)  replace
  option as() not allowed
  r(198);

35.
36. *** Save log as pdf.

37. log close
        name:  <unnamed>
         log:  /nas/longleaf/home/rayrayc/hrs_margins_final.smcl
    log type:  smcl
   closed on:  28 Nov 2022, 00:38:41
```