```
1 . sem (age -> icdxcnt) (age -> BSIsoma) (age -> WHPpa) (cumdose1 -> cumdose2)
  > (cumdose1 -> cumdose3) (cumdose2 -> cumdose3) (crhrw1 -> crhrw2) (crhrw1 ->
  > crhrw3) (crhrw2 -> crhrw3) (crhrw3 -> icdxcnt) (crhrw3 -> BSIposymp) (crhrw3
  >  -> BSIsoma) (icdxcnt -> crhrw2) (icdxcnt -> BSIanx) (BSIposymp -> WHPsleep)
  >  (BSIsoma -> BSIposymp) (BSIsoma -> WHPel) (BSIsoma -> WHPpa) (WHPsleep -> W
  > HPel) (WHPel -> BSIanx) (WHPpa -> WHPsleep) (BSIanx -> BSIposymp) (BSIanx ->
  >  BSIsoma) (BSIanx -> WHPel) (mhoutw2 -> BSIanx) (mhoutw2 -> mhoutw3) if gend
  > er==2, cov( e.crhrw2*e.BSIanx e.WHPsleep*e.WHPel) nocapslatent
  (92 observations with missing values excluded;
   specify option 'method(mlmv)' to use all observations)

  Endogenous variables

  Observed:  icdxcnt BSIsoma WHPpa cumdose2 cumdose3 crhrw2 crhrw3 BSIposymp
             BSIanx WHPsleep WHPel mhoutw3

  Exogenous variables

  Observed:  age cumdose1 crhrw1 mhoutw2

  Fitting target model:

  Iteration 0:   log likelihood = -9521.4352  (not concave)
  Iteration 1:   log likelihood = -9455.4597  (not concave)
  Iteration 2:   log likelihood = -9437.8044  (not concave)
  Iteration 3:   log likelihood = -9415.7751
  Iteration 4:   log likelihood = -9407.1459
  Iteration 5:   log likelihood = -9388.8254
  Iteration 6:   log likelihood = -9376.4106
  Iteration 7:   log likelihood = -9373.3205
  Iteration 8:   log likelihood = -9373.1345
  Iteration 9:   log likelihood = -9373.1292
  Iteration 10:  log likelihood = -9373.1292

  Structural equation model                       Number of obs      =       271
  Estimation method  = ml
  Log likelihood     = -9373.1292
```

	OIM Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
icdxcnt <-						
crhrw3	-.8031248	.2949584	-2.72	0.006	-1.381233	-.2250169
age	.0548704	.0149893	3.66	0.000	.0254919	.0842488
_cons	.5465236	.76044	0.72	0.472	-.9439115	2.036959
BSIsoma <-						
crhrw3	.9457746	.3124192	3.03	0.002	.3334443	1.558105
BSIanx	.7320948	.0937715	7.81	0.000	.5483061	.9158835
age	.1382351	.0237739	5.81	0.000	.0916392	.184831
_cons	.2183682	1.367587	0.16	0.873	-2.462053	2.898789
WHPpa <-						
BSIsoma	1.342426	.2023052	6.64	0.000	.9459149	1.738937
age	.6283698	.1005877	6.25	0.000	.4312215	.825518
_cons	-32.31791	4.80927	-6.72	0.000	-41.7439	-22.89191
cumdo~2 <-						
cumdose1	2.23974	.0473899	47.26	0.000	2.146857	2.332622
_cons	.1250143	.0329249	3.80	0.000	.0604827	.189546
cumdo~3 <-						
cumdose2	1.647304	.0243712	67.59	0.000	1.599537	1.695071
cumdose1	-.8858885	.0578017	-15.33	0.000	-.9991777	-.7725993
_cons	.0429186	.0135563	3.17	0.002	.0163487	.0694885
crhrw2 <-						
icdxcnt	.0965896	.0240874	4.01	0.000	.0493793	.1438
crhrw1	.6729842	.0425137	15.83	0.000	.5896589	.7563096
_cons	-.3127115	.0879877	-3.55	0.000	-.4851642	-.1402588
crhrw3 <-						
crhrw2	1.052995	.0263549	39.95	0.000	1.00134	1.104649
crhrw1	-.0952482	.0247817	-3.84	0.000	-.1438194	-.0466769
_cons	-.024856	.0161705	-1.54	0.124	-.0565497	.0068377
BSIpo~p <-						
BSIsoma	2.663238	.1461981	18.22	0.000	2.376695	2.949781
crhrw3	2.786383	.7846353	3.55	0.000	1.248526	4.32424
BSIanx	3.78458	.2343348	16.15	0.000	3.325292	4.243868
_cons	16.54043	1.984294	8.34	0.000	12.65128	20.42957
BSIanx <-						
icdxcnt	.420086	.082999	5.06	0.000	.257411	.582761
WHPel	.0248927	.010932	2.28	0.023	.0034664	.0463189

mhoutw2	.8623744	.2454177	3.51	0.000	.3813645	1.343384
_cons	6.604833	.4253623	15.53	0.000	5.771138	7.438528
WHPsl~p <-						
WHPpa	.5306325	.0702498	7.55	0.000	.3929454	.6683196
BSIposymp	.4256945	.0526428	8.09	0.000	.3225165	.5288726
_cons	-19.62527	4.490304	-4.37	0.000	-28.42611	-10.82444
WHPel <-						
BSIsoma	1.263619	.499035	2.53	0.011	.2855281	2.241709
BSIanx	-2.002995	.9806009	-2.04	0.041	-3.924938	-.081053
WHPsleep	.8998877	.1609885	5.59	0.000	.5843561	1.215419
_cons	7.340982	7.490115	0.98	0.327	-7.339373	22.02134
mhoutw3 <-						
mhoutw2	.9908718	.0558917	17.73	0.000	.8813261	1.100417
_cons	.0780971	.0421331	1.85	0.064	-.0044822	.1606764
Variance						
e.icdxcnt	6.581184	.6729831			5.385938	8.04168
e.BSIsoma	17.88075	1.55698			15.07533	21.20825
e.WHPpa	296.0599	25.45687			250.1431	350.4052
e.cumdose2	.2134763	.0183392			.1803953	.2526237
e.cumdose3	.0343616	.0029519			.0290368	.0406629
e.crhrw2	.4005253	.037603			.3332081	.4814424
e.crhrw3	.0698441	.0060059			.0590112	.0826656
e.BSIpos~p	114.5414	9.849911			96.77518	135.5692
e.BSIanx	9.752863	.9427245			8.069635	11.78719
e.WHPsleep	550.4476	47.30512			465.1192	651.43
e.WHPel	923.2004	151.6427			669.0825	1273.832
e.mhoutw3	.477343	.0410073			.4033723	.5648785
Covariance						
e.crhrw2						
e.BSIanx	.5036959	.1333653	3.78	0.000	.2423047	.765087
e.WHPsleep						
e.WHPel	-390.5911	101.2789	-3.86	0.000	-589.0942	-192.0881

LR test of model vs. saturated: chi2(**86**) = **83.02**, Prob > chi2 = **0.5709**

```
2 .
3 . estat stable
```

Stability analysis of simultaneous equation systems

Eigenvalue stability condition

Eigenvalue	Modulus
.5464746	.546475
.08917607 + .521302*i*	.528874
.08917607 - .521302*i*	.528874
-.3624134 + .2582968*i*	.44504
-.3624134 - .2582968*i*	.44504
.2169451 + .37576*i*	.43389
-.4338902	.43389
.2169451 - .37576*i*	.43389
-1.095e-16 + 2.482e-09*i*	2.5e-09
-1.095e-16 - 2.482e-09*i*	2.5e-09
-1.964e-17	2.0e-17
0	0

stability index = .5464746
All the eigenvalues lie inside the unit circle.
SEM satisfies stability condition.

```
4 . estat gof
```

Fit statistic	Value	Description
Likelihood ratio		
chi2_ms(86)	83.023	model vs. saturated
p > chi2	0.571	
chi2_bs(114)	4156.009	baseline vs. saturated
p > chi2	0.000	

```
5 . estat ic
```

Model	Obs	ll(null)	ll(model)	df	AIC	BIC
.	**271**	.	**-9373.129**	**52**	**18850.26**	**19037.57**

Note: N=Obs used in calculating BIC; see **[R] BIC note**

```
6 . sem (age -> icdxcnt) (age -> BSIsoma) (age -> WHPpa) (cumdose1 -> cumdose2)
  > (cumdose1 -> cumdose3) (cumdose2 -> cumdose3) (crhrw1 -> crhrw2) (crhrw1 ->
  > crhrw3) (crhrw2 -> crhrw3) (crhrw3 -> icdxcnt) (crhrw3 -> BSIposymp) (crhrw3
  >  -> BSIsoma) (icdxcnt -> crhrw2) (icdxcnt -> BSIanx) (BSIposymp -> WHPsleep)
  >  (BSIsoma -> BSIposymp) (BSIsoma -> WHPel) (BSIsoma -> WHPpa) (WHPsleep -> W
  > HPel) (WHPel -> BSIanx) (WHPpa -> WHPsleep) (BSIanx -> BSIposymp) (BSIanx ->
  >  BSIsoma) (BSIanx -> WHPel) (mhoutw2 -> BSIanx) (mhoutw2 -> mhoutw3) if gend
  > er==2, vce(cluster id) cov( e.crhrw2*e.BSIanx e.WHPsleep*e.WHPel) nocapslate
  > nt
  (92 observations with missing values excluded;
   specify option 'method(mlmv)' to use all observations)

  Endogenous variables

  Observed:  icdxcnt BSIsoma WHPpa cumdose2 cumdose3 crhrw2 crhrw3 BSIposymp
             BSIanx WHPsleep WHPel mhoutw3

  Exogenous variables

  Observed:  age cumdose1 crhrw1 mhoutw2

  Fitting target model:

  Iteration 0:   log pseudolikelihood = -9521.4352  (not concave)
  Iteration 1:   log pseudolikelihood = -9455.4597  (not concave)
  Iteration 2:   log pseudolikelihood = -9437.8044  (not concave)
  Iteration 3:   log pseudolikelihood = -9415.7751
  Iteration 4:   log pseudolikelihood = -9407.1459
  Iteration 5:   log pseudolikelihood = -9388.8254
  Iteration 6:   log pseudolikelihood = -9376.4106
  Iteration 7:   log pseudolikelihood = -9373.3205
  Iteration 8:   log pseudolikelihood = -9373.1345
  Iteration 9:   log pseudolikelihood = -9373.1292
  Iteration 10:  log pseudolikelihood = -9373.1292

  Structural equation model                       Number of obs      =       271
  Estimation method  = ml
  Log pseudolikelihood= -9373.1292
```

(Std. Err. adjusted for **271** clusters in id)

	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
icdxcnt <-						
crhrw3	-.8031248	.302329	-2.66	0.008	-1.395679	-.2105709
age	.0548704	.0160157	3.43	0.001	.0234802	.0862605
_cons	.5465236	.7882423	0.69	0.488	-.998403	2.09145
BSIsoma <-						
crhrw3	.9457746	.3375707	2.80	0.005	.2841482	1.607401
BSIanx	.7320948	.1220128	6.00	0.000	.4929541	.9712355
age	.1382351	.0238501	5.80	0.000	.0914898	.1849804
_cons	.2183682	1.33021	0.16	0.870	-2.388795	2.825531
WHPpa <-						
BSIsoma	1.342426	.2160593	6.21	0.000	.9189573	1.765894
age	.6283698	.1056268	5.95	0.000	.421345	.8353945
_cons	-32.31791	4.715402	-6.85	0.000	-41.55992	-23.07589
cumdo~2 <-						
cumdose1	2.23974	.0833019	26.89	0.000	2.076471	2.403008
_cons	.1250143	.0348895	3.58	0.000	.0566322	.1933964
cumdo~3 <-						
cumdose2	1.647304	.1084976	15.18	0.000	1.434653	1.859956
cumdose1	-.8858885	.2532968	-3.50	0.000	-1.382341	-.3894358
_cons	.0429186	.0244673	1.75	0.079	-.0050364	.0908735
crhrw2 <-						
icdxcnt	.0965896	.0264452	3.65	0.000	.044758	.1484212
crhrw1	.6729842	.0471062	14.29	0.000	.5806579	.7653106
_cons	-.3127115	.0818918	-3.82	0.000	-.4732165	-.1522065
crhrw3 <-						
crhrw2	1.052995	.0295016	35.69	0.000	.9951727	1.110817
crhrw1	-.0952482	.0353702	-2.69	0.007	-.1645724	-.0259239
_cons	-.024856	.0162435	-1.53	0.126	-.0566926	.0069806
BSIpo~p <-						
BSIsoma	2.663238	.1880788	14.16	0.000	2.29461	3.031866
crhrw3	2.786383	.7967805	3.50	0.000	1.224722	4.348044
BSIanx	3.78458	.2700086	14.02	0.000	3.255373	4.313787
_cons	16.54043	2.062173	8.02	0.000	12.49864	20.58221
BSIanx <-						
icdxcnt	.420086	.0946662	4.44	0.000	.2345436	.6056284

WHPel	.0248927	.0117044	2.13	0.033	.0019524	.0478329
mhoutw2	.8623744	.1139202	7.57	0.000	.6390948	1.085654
_cons	6.604833	.3882289	17.01	0.000	5.843918	7.365747
WHPsl~p <-						
WHPpa	.5306325	.0781048	6.79	0.000	.3775499	.6837151
BSIposymp	.4256945	.0515179	8.26	0.000	.3247214	.5266677
_cons	-19.62527	3.971968	-4.94	0.000	-27.41019	-11.84036
WHPel <-						
BSIsoma	1.263619	.6750993	1.87	0.061	-.0595516	2.586789
BSIanx	-2.002995	.9722403	-2.06	0.039	-3.908551	-.0974393
WHPsleep	.8998877	.1857356	4.84	0.000	.5358527	1.263923
_cons	7.340982	7.993624	0.92	0.358	-8.326233	23.0082
mhoutw3 <-						
mhoutw2	.9908718	.034877	28.41	0.000	.922514	1.05923
_cons	.0780971	.0416722	1.87	0.061	-.003579	.1597732
Variance						
e.icdxcnt	6.581184	.8599849			5.094186	8.50224
e.BSIsoma	17.88075	1.80809			14.66604	21.80011
e.WHPpa	296.0599	34.61553			235.4271	372.3082
e.cumdose2	.2134763	.1414293			.0582671	.7821241
e.cumdose3	.0343616	.0176898			.0125275	.0942505
e.crhrw2	.4005253	.0534935			.3082796	.5203734
e.crhrw3	.0698441	.013151			.0482899	.101019
e.BSIpos~p	114.5414	14.532			89.32429	146.8775
e.BSIanx	9.752863	1.233761			7.611199	12.49716
e.WHPsleep	550.4476	59.63452			445.1418	680.6654
e.WHPel	923.2004	166.859			647.8137	1315.655
e.mhoutw3	.477343	.3659961			.1062145	2.145248
Covariance						
e.crhrw2						
e.BSIanx	.5036959	.1701266	2.96	0.003	.1702538	.8371379
e.WHPsleep						
e.WHPel	-390.5911	112.4934	-3.47	0.001	-611.0742	-170.108

```
7 .
8 . estat teffects, standardized
```

Direct effects

(Std. Err. adjusted for **271** clusters in id)

	Coef.	Robust Std. Err.	z	P>|z|	Std. Coef.
Structural					
icdxcnt <-					
icdxcnt	**0**	(no path)			**0**
crhrw2	**0**	(no path)			**0**
crhrw3	**-.8031248**	**.302329**	**-2.66**	**0.008**	**-.2802517**
age	**.0548704**	**.0160157**	**3.43**	**0.001**	**.2468668**
crhrw1	**0**	(no path)			**0**
BSIsoma <-					
icdxcnt	**0**	(no path)			**0**
BSIsoma	**0**	(no path)			**0**
WHPpa	**0**	(no path)			**0**
crhrw2	**0**	(no path)			**0**
crhrw3	**.9457746**	**.3375707**	**2.80**	**0.005**	**.1461635**
BSIposymp	**0**	(no path)			**0**
BSIanx	**.7320948**	**.1220128**	**6.00**	**0.000**	**.4599692**
WHPsleep	**0**	(no path)			**0**
WHPel	**0**	(no path)			**0**
age	**.1382351**	**.0238501**	**5.80**	**0.000**	**.2754414**
crhrw1	**0**	(no path)			**0**
mhoutw2	**0**	(no path)			**0**
WHPpa <-					
icdxcnt	**0**	(no path)			**0**
BSIsoma	**1.342426**	**.2160593**	**6.21**	**0.000**	**.3587139**
WHPpa	**0**	(no path)			**0**
crhrw2	**0**	(no path)			**0**
crhrw3	**0**	(no path)			**0**
BSIposymp	**0**	(no path)			**0**
BSIanx	**0**	(no path)			**0**
WHPsleep	**0**	(no path)			**0**
WHPel	**0**	(no path)			**0**
age	**.6283698**	**.1056268**	**5.95**	**0.000**	**.3345677**
crhrw1	**0**	(no path)			**0**
mhoutw2	**0**	(no path)			**0**
cumdo~2 <-					
cumdose1	**2.23974**	**.0833019**	**26.89**	**0.000**	**.9443532**

cumdo~3 <-					
cumdose2	1.647304	.1084976	15.18	0.000	1.260309
cumdose1	-.8858885	.2532968	-3.50	0.000	-.2857716
crhrw2 <-					
icdxcnt	.0965896	.0264452	3.65	0.000	.2850649
crhrw2	0	(no path)			0
crhrw3	0	(no path)			0
age	0	(no path)			0
crhrw1	.6729842	.0471062	14.29	0.000	.7013116
crhrw3 <-					
icdxcnt	0	(no path)			0
crhrw2	1.052995	.0295016	35.69	0.000	1.022463
crhrw3	0	(no path)			0
age	0	(no path)			0
crhrw1	-.0952482	.0353702	-2.69	0.007	-.0963794
BSIpo~p <-					
icdxcnt	0	(no path)			0
BSIsoma	2.663238	.1880788	14.16	0.000	.5273401
WHPpa	0	(no path)			0
crhrw2	0	(no path)			0
crhrw3	2.786383	.7967805	3.50	0.000	.0852654
BSIposymp	0	(no path)			0
BSIanx	3.78458	.2700086	14.02	0.000	.4708255
WHPsleep	0	(no path)			0
WHPel	0	(no path)			0
age	0	(no path)			0
crhrw1	0	(no path)			0
mhoutw2	0	(no path)			0
BSIanx <-					
icdxcnt	.420086	.0946662	4.44	0.000	.2961166
BSIsoma	0	(no path)			0
WHPpa	0	(no path)			0
crhrw2	0	(no path)			0
crhrw3	0	(no path)			0
BSIposymp	0	(no path)			0
BSIanx	0	(no path)			0
WHPsleep	0	(no path)			0
WHPel	.0248927	.0117044	2.13	0.033	.2332627
age	0	(no path)			0
crhrw1	0	(no path)			0
mhoutw2	.8623744	.1139202	7.57	0.000	.1819428
WHPsl~p <-					
icdxcnt	0	(no path)			0
BSIsoma	0	(no path)			0

WHPpa	.5306325	.0781048	6.79	0.000	.3638053
crhrw2	0	(no path)			0
crhrw3	0	(no path)			0
BSIposymp	.4256945	.0515179	8.26	0.000	.3938677
BSIanx	0	(no path)			0
WHPsleep	0	(no path)			0
WHPel	0	(no path)			0
age	0	(no path)			0
crhrw1	0	(no path)			0
mhoutw2	0	(no path)			0
WHPel <-					
icdxcnt	0	(no path)			0
BSIsoma	1.263619	.6750993	1.87	0.061	.2146254
WHPpa	0	(no path)			0
crhrw2	0	(no path)			0
crhrw3	0	(no path)			0
BSIposymp	0	(no path)			0
BSIanx	-2.002995	.9722403	-2.06	0.039	-.2137501
WHPsleep	.8998877	.1857356	4.84	0.000	.8342961
WHPel	0	(no path)			0
age	0	(no path)			0
crhrw1	0	(no path)			0
mhoutw2	0	(no path)			0
mhoutw3 <-					
mhoutw2	.9908718	.034877	28.41	0.000	.7327941

Indirect effects

(Std. Err. adjusted for **271** clusters in id)

	Coef.	Robust Std. Err.	z	P>|z|	Std. Coef.
Structural					
icdxcnt <-					
icdxcnt	-.075516	.0206755	-3.65	0.000	-.075516
crhrw2	-.7818233	.0219042	-35.69	0.000	-.2649081
crhrw3	.0606488	.0228307	2.66	0.008	.0211635
age	-.0041436	.0030079	-1.38	0.168	-.0186424
crhrw1	-.4554353	.1570596	-2.90	0.004	-.1608124
BSIsoma <-					
icdxcnt	.391789	.0854297	4.59	0.000	.1735155
BSIsoma	.055496	.0139648	3.97	0.000	.055496
WHPpa	.0090602	.0013336	6.79	0.000	.0339063
crhrw2	.7411594	.0207649	35.69	0.000	.1112204

crhrw3	-.2419161	.1210566	-2.00	0.046	-.0373866
BSIposymp	.0072685	.0008796	8.26	0.000	.0367081
BSIanx	.0301318	.0225401	1.34	0.181	.0189316
WHPsleep	.0170743	.0035241	4.84	0.000	.093199
WHPel	.0189739	.0089214	2.13	0.033	.1117097
age	.0348623	.0093848	3.71	0.000	.0694651
crhrw1	.4317473	.251408	1.72	0.086	.0675163
mhoutw2	.6573247	.1555854	4.22	0.000	.0871326
WHPpa <-					
icdxcnt	.5259477	.1146831	4.59	0.000	.0622424
BSIsoma	.0744993	.0187468	3.97	0.000	.0199072
WHPpa	.0121627	.0017902	6.79	0.000	.0121627
crhrw2	.9949514	.0278754	35.69	0.000	.0398963
crhrw3	.9448778	.5193192	1.82	0.069	.0390198
BSIposymp	.0097574	.0011808	8.26	0.000	.0131677
BSIanx	1.023233	.1856774	5.51	0.000	.1717884
WHPsleep	.022921	.0047309	4.84	0.000	.0334318
WHPel	.025471	.0119764	2.13	0.033	.0400718
age	.2323703	.0498229	4.66	0.000	.1237227
crhrw1	.5795887	.3596388	1.61	0.107	.024219
mhoutw2	.8824096	.2300385	3.84	0.000	.0312557
cumdo~2 <-					
cumdose1	0	(no path)			0
cumdo~3 <-					
cumdose2	0	(no path)			0
cumdose1	3.689533	.2774007	13.30	0.000	1.190177
crhrw2 <-					
icdxcnt	-.0072941	.001997	-3.65	0.000	-.021527
crhrw2	-.075516	.0021157	-35.69	0.000	-.075516
crhrw3	-.0717155	.0269966	-2.66	0.008	-.0738569
age	.0048997	.0020468	2.39	0.017	.0650588
crhrw1	-.0439903	.0237356	-1.85	0.064	-.045842
crhrw3 <-					
icdxcnt	.0940277	.0257438	3.65	0.000	.2694579
crhrw2	-.079518	.0022278	-35.69	0.000	-.0772123
crhrw3	-.075516	.0284273	-2.66	0.008	-.075516
age	.0051593	.002169	2.38	0.017	.0665202
crhrw1	.6623273	.0609502	10.87	0.000	.6701936
BSIpo~p <-					
icdxcnt	2.871066	.6301852	4.56	0.000	.2517735
BSIsoma	.434687	.1093833	3.97	0.000	.0860711
WHPpa	.0709664	.0104457	6.79	0.000	.0525867
crhrw2	3.758278	.105295	35.69	0.000	.1116715

crhrw3	.7827492	1.423194	0.55	0.582	.0239527
BSIposymp	.0569321	.00689	8.26	0.000	.0569321
BSIanx	2.185758	.4633503	4.72	0.000	.271922
WHPsleep	.1337393	.0276036	4.84	0.000	.1445462
WHPel	.1486177	.0698794	2.13	0.033	.1732553
age	.6303716	.1072896	5.88	0.000	.2487072
crhrw1	2.189308	1.046217	2.09	0.036	.0677901
mhoutw2	5.148667	.8592101	5.99	0.000	.1351376
BSIanx <-					
icdxcnt	-.0063964	.0051704	-1.24	0.216	-.0045088
BSIsoma	.0758044	.0190752	3.97	0.000	.1206516
WHPpa	.0123757	.0018216	6.79	0.000	.0737142
crhrw2	-.2452282	.0068705	-35.69	0.000	-.0585709
crhrw3	-.2328864	.1291763	-1.80	0.071	-.0572841
BSIposymp	.0099283	.0012015	8.26	0.000	.0798055
BSIanx	.0411584	.0307885	1.34	0.181	.0411584
WHPsleep	.0233226	.0048138	4.84	0.000	.20262
WHPel	.0010245	.0004817	2.13	0.033	.0096007
age	.0409547	.0118828	3.45	0.001	.1298831
crhrw1	-.1428527	.1035645	-1.38	0.168	-.0355554
mhoutw2	.0354939	.0141457	2.51	0.012	.0074885
WHPsl~p <-					
icdxcnt	1.501282	.3290379	4.56	0.000	.1218096
BSIsoma	2.070636	.1871261	11.07	0.000	.3793472
WHPpa	.0366639	.0053966	6.79	0.000	.025137
crhrw2	2.127832	.0596151	35.69	0.000	.0584983
crhrw3	2.020743	.8584617	2.35	0.019	.0572131
BSIposymp	.0294133	.0035596	8.26	0.000	.0272142
BSIanx	3.084501	.3463248	8.91	0.000	.3550418
WHPsleep	.0690947	.0142611	4.84	0.000	.0690947
WHPel	.0767815	.0361023	2.13	0.033	.082818
age	.7250824	.1094222	6.63	0.000	.2646862
crhrw1	1.239525	.629286	1.97	0.049	.0355114
mhoutw2	2.659995	.5042529	5.28	0.000	.0645973
WHPel <-					
icdxcnt	1.017439	.2213977	4.60	0.000	.0765349
BSIsoma	1.78163	.15417	11.56	0.000	.3026095
WHPpa	.4971632	.0731784	6.79	0.000	.3160138
crhrw2	3.342543	.0936474	35.69	0.000	.0851951
crhrw3	3.174321	1.074142	2.96	0.003	.0833234
BSIposymp	.3988441	.0482684	8.26	0.000	.342127
BSIanx	3.656428	.4339224	8.43	0.000	.3901966
WHPsleep	.0370379	.0076446	4.84	0.000	.0343383
WHPel	.0411584	.0193525	2.13	0.033	.0411584
age	.7891898	.1181401	6.68	0.000	.2670898
crhrw1	1.947131	.8495071	2.29	0.022	.0517177

mhoutw2	**1.425878**	**.9611923**	**1.48**	**0.138**	**.0321032**
mhoutw3 <- mhoutw2	**0**	(no path)			**0**

Total effects

(Std. Err. adjusted for **271** clusters in id)

	Coef.	Robust Std. Err.	z	P>|z|	Std. Coef.
Structural					
icdxcnt <-					
icdxcnt	**-.075516**	**.0206755**	**-3.65**	**0.000**	**-.075516**
crhrw2	**-.7818233**	**.0219042**	**-35.69**	**0.000**	**-.2649081**
crhrw3	**-.742476**	**.2794983**	**-2.66**	**0.008**	**-.2590882**
age	**.0507268**	**.0139322**	**3.64**	**0.000**	**.2282244**
crhrw1	**-.4554353**	**.1570596**	**-2.90**	**0.004**	**-.1608124**
BSIsoma <-					
icdxcnt	**.391789**	**.0854297**	**4.59**	**0.000**	**.1735155**
BSIsoma	**.055496**	**.0139648**	**3.97**	**0.000**	**.055496**
WHPpa	**.0090602**	**.0013336**	**6.79**	**0.000**	**.0339063**
crhrw2	**.7411594**	**.0207649**	**35.69**	**0.000**	**.1112204**
crhrw3	**.7038586**	**.3868514**	**1.82**	**0.069**	**.1087769**
BSIposymp	**.0072685**	**.0008796**	**8.26**	**0.000**	**.0367081**
BSIanx	**.7622266**	**.1383149**	**5.51**	**0.000**	**.4789008**
WHPsleep	**.0170743**	**.0035241**	**4.84**	**0.000**	**.093199**
WHPel	**.0189739**	**.0089214**	**2.13**	**0.033**	**.1117097**
age	**.1730974**	**.0266331**	**6.50**	**0.000**	**.3449064**
crhrw1	**.4317473**	**.251408**	**1.72**	**0.086**	**.0675163**
mhoutw2	**.6573247**	**.1555854**	**4.22**	**0.000**	**.0871326**
WHPpa <-					
icdxcnt	**.5259477**	**.1146831**	**4.59**	**0.000**	**.0622424**
BSIsoma	**1.416925**	**.2245826**	**6.31**	**0.000**	**.3786211**
WHPpa	**.0121627**	**.0017902**	**6.79**	**0.000**	**.0121627**
crhrw2	**.9949514**	**.0278754**	**35.69**	**0.000**	**.0398963**
crhrw3	**.9448778**	**.5193192**	**1.82**	**0.069**	**.0390198**
BSIposymp	**.0097574**	**.0011808**	**8.26**	**0.000**	**.0131677**
BSIanx	**1.023233**	**.1856774**	**5.51**	**0.000**	**.1717884**
WHPsleep	**.022921**	**.0047309**	**4.84**	**0.000**	**.0334318**
WHPel	**.025471**	**.0119764**	**2.13**	**0.033**	**.0400718**
age	**.8607401**	**.1098115**	**7.84**	**0.000**	**.4582904**
crhrw1	**.5795887**	**.3596388**	**1.61**	**0.107**	**.024219**
mhoutw2	**.8824096**	**.2300385**	**3.84**	**0.000**	**.0312557**

cumdo~2 <-					
cumdose1	2.23974	.0833019	26.89	0.000	.9443532
cumdo~3 <-					
cumdose2	1.647304	.1084976	15.18	0.000	1.260309
cumdose1	2.803644	.1111642	25.22	0.000	.9044049
crhrw2 <-					
icdxcnt	.0892955	.0244481	3.65	0.000	.263538
crhrw2	-.075516	.0021157	-35.69	0.000	-.075516
crhrw3	-.0717155	.0269966	-2.66	0.008	-.0738569
age	.0048997	.0020468	2.39	0.017	.0650588
crhrw1	.6289939	.0533551	11.79	0.000	.6554696
crhrw3 <-					
icdxcnt	.0940277	.0257438	3.65	0.000	.2694579
crhrw2	.9734768	.0272737	35.69	0.000	.9452509
crhrw3	-.075516	.0284273	-2.66	0.008	-.075516
age	.0051593	.002169	2.38	0.017	.0665202
crhrw1	.5670791	.0574862	9.86	0.000	.5738141
BSIpo~p <-					
icdxcnt	2.871066	.6301852	4.56	0.000	.2517735
BSIsoma	3.097925	.2512324	12.33	0.000	.6134113
WHPpa	.0709664	.0104457	6.79	0.000	.0525867
crhrw2	3.758278	.105295	35.69	0.000	.1116715
crhrw3	3.569132	1.466028	2.43	0.015	.1092181
BSIposymp	.0569321	.00689	8.26	0.000	.0569321
BSIanx	5.970338	.5996247	9.96	0.000	.7427476
WHPsleep	.1337393	.0276036	4.84	0.000	.1445462
WHPel	.1486177	.0698794	2.13	0.033	.1732553
age	.6303716	.1072896	5.88	0.000	.2487072
crhrw1	2.189308	1.046217	2.09	0.036	.0677901
mhoutw2	5.148667	.8592101	5.99	0.000	.1351376
BSIanx <-					
icdxcnt	.4136896	.094789	4.36	0.000	.2916078
BSIsoma	.0758044	.0190752	3.97	0.000	.1206516
WHPpa	.0123757	.0018216	6.79	0.000	.0737142
crhrw2	-.2452282	.0068705	-35.69	0.000	-.0585709
crhrw3	-.2328864	.1291763	-1.80	0.071	-.0572841
BSIposymp	.0099283	.0012015	8.26	0.000	.0798055
BSIanx	.0411584	.0307885	1.34	0.181	.0411584
WHPsleep	.0233226	.0048138	4.84	0.000	.20262
WHPel	.0259172	.0121862	2.13	0.033	.2428634
age	.0409547	.0118828	3.45	0.001	.1298831
crhrw1	-.1428527	.1035645	-1.38	0.168	-.0355554
mhoutw2	.8978683	.1219241	7.36	0.000	.1894313

WHPsl~p <-					
icdxcnt	1.501282	.3290379	4.56	0.000	.1218096
BSIsoma	2.070636	.1871261	11.07	0.000	.3793472
WHPpa	.5672964	.0835014	6.79	0.000	.3889423
crhrw2	2.127832	.0596151	35.69	0.000	.0584983
crhrw3	2.020743	.8584617	2.35	0.019	.0572131
BSIposymp	.4551078	.0550775	8.26	0.000	.4210819
BSIanx	3.084501	.3463248	8.91	0.000	.3550418
WHPsleep	.0690947	.0142611	4.84	0.000	.0690947
WHPel	.0767815	.0361023	2.13	0.033	.082818
age	.7250824	.1094222	6.63	0.000	.2646862
crhrw1	1.239525	.629286	1.97	0.049	.0355114
mhoutw2	2.659995	.5042529	5.28	0.000	.0645973
WHPel <-					
icdxcnt	1.017439	.2213977	4.60	0.000	.0765349
BSIsoma	3.045249	.7662971	3.97	0.000	.5172348
WHPpa	.4971632	.0731784	6.79	0.000	.3160138
crhrw2	3.342543	.0936474	35.69	0.000	.0851951
crhrw3	3.174321	1.074142	2.96	0.003	.0833234
BSIposymp	.3988441	.0482684	8.26	0.000	.342127
BSIanx	1.653433	1.23685	1.34	0.181	.1764465
WHPsleep	.9369256	.1933801	4.84	0.000	.8686344
WHPel	.0411584	.0193525	2.13	0.033	.0411584
age	.7891898	.1181401	6.68	0.000	.2670898
crhrw1	1.947131	.8495071	2.29	0.022	.0517177
mhoutw2	1.425878	.9611923	1.48	0.138	.0321032
mhoutw3 <-					
mhoutw2	.9908718	.034877	28.41	0.000	.7327941

```
9 . estat framework
  (model contains no latent variables)
```

Endogenous variables on endogenous variables

	observed				
Beta	icdxcnt	BSIsoma	WHPpa	cumdose2	cumdose3
observed					
icdxcnt	0	0	0	0	0
BSIsoma	0	0	0	0	0
WHPpa	0	1.342426	0	0	0
cumdose2	0	0	0	0	0
cumdose3	0	0	0	1.647304	0
crhrw2	.0965896	0	0	0	0
crhrw3	0	0	0	0	0
BSIposymp	0	2.663238	0	0	0

BSIanx	.420086	0	0	0	0
WHPsleep	0	0	.5306325	0	0
WHPel	0	1.263619	0	0	0
mhoutw3	0	0	0	0	0

	observed				
Beta	crhrw2	crhrw3	BSIposymp	BSIanx	WHPsleep
observed					
icdxcnt	0	-.8031248	0	0	0
BSIsoma	0	.9457746	0	.7320948	0
WHPpa	0	0	0	0	0
cumdose2	0	0	0	0	0
cumdose3	0	0	0	0	0
crhrw2	0	0	0	0	0
crhrw3	1.052995	0	0	0	0
BSIposymp	0	2.786383	0	3.78458	0
BSIanx	0	0	0	0	0
WHPsleep	0	0	.4256945	0	0
WHPel	0	0	0	-2.002995	.8998877
mhoutw3	0	0	0	0	0

	observed	
Beta	WHPel	mhoutw3
observed		
icdxcnt	0	0
BSIsoma	0	0
WHPpa	0	0
cumdose2	0	0
cumdose3	0	0
crhrw2	0	0
crhrw3	0	0
BSIposymp	0	0
BSIanx	.0248927	0
WHPsleep	0	0
WHPel	0	0
mhoutw3	0	0

Exogenous variables on endogenous variables

Gamma	observed age	cumdose1	crhrw1	mhoutw2
observed				
icdxcnt	**.0548704**	**0**	**0**	**0**
BSIsoma	**.1382351**	**0**	**0**	**0**
WHPpa	**.6283698**	**0**	**0**	**0**
cumdose2	**0**	**2.23974**	**0**	**0**
cumdose3	**0**	**-.8858885**	**0**	**0**
crhrw2	**0**	**0**	**.6729842**	**0**
crhrw3	**0**	**0**	**-.0952482**	**0**
BSIposymp	**0**	**0**	**0**	**0**
BSIanx	**0**	**0**	**0**	**.8623744**
WHPsleep	**0**	**0**	**0**	**0**
WHPel	**0**	**0**	**0**	**0**
mhoutw3	**0**	**0**	**0**	**.9908718**

Covariances of error variables

Psi	observed e.icdxcnt	e.BSIsoma	e.WHPpa	e.cumdo~2	e.cumdo~3
observed					
e.icdxcnt	**6.581184**				
e.BSIsoma	**0**	**17.88075**			
e.WHPpa	**0**	**0**	**296.0599**		
e.cumdose2	**0**	**0**	**0**	**.2134763**	
e.cumdose3	**0**	**0**	**0**	**0**	**.0343616**
e.crhrw2	**0**	**0**	**0**	**0**	**0**
e.crhrw3	**0**	**0**	**0**	**0**	**0**
e.BSIposymp	**0**	**0**	**0**	**0**	**0**
e.BSIanx	**0**	**0**	**0**	**0**	**0**
e.WHPsleep	**0**	**0**	**0**	**0**	**0**
e.WHPel	**0**	**0**	**0**	**0**	**0**
e.mhoutw3	**0**	**0**	**0**	**0**	**0**

	observed				
Psi	e.crhrw2	e.crhrw3	e.BSIpo~p	e.BSIanx	e.WHPsl~p
observed					
e.crhrw2	**.4005253**				
e.crhrw3	**0**	**.0698441**			
e.BSIposymp	**0**	**0**	**114.5414**		
e.BSIanx	**.5036959**	**0**	**0**	**9.752863**	
e.WHPsleep	**0**	**0**	**0**	**0**	**550.4476**
e.WHPel	**0**	**0**	**0**	**0**	**-390.5911**
e.mhoutw3	**0**	**0**	**0**	**0**	**0**

	observed	
Psi	e.WHPel	e.mhoutw3
observed		
e.WHPel	**923.2004**	
e.mhoutw3	**0**	**.477343**

Intercepts of endogenous variables

	observed				
alpha	icdxcnt	BSIsoma	WHPpa	cumdose2	cumdose3
_cons	**.5465236**	**.2183682**	**-32.31791**	**.1250143**	**.0429186**

	observed				
alpha	crhrw2	crhrw3	BSIposymp	BSIanx	WHPsleep
_cons	**-.3127115**	**-.024856**	**16.54043**	**6.604833**	**-19.62527**

	observed	
alpha	WHPel	mhoutw3
_cons	**7.340982**	**.0780971**

Covariances of exogenous variables

Phi	observed age	cumdose1	crhrw1	mhoutw2
observed				
age	**127.4052**			
cumdose1	**1.157063**	**.3507586**		
crhrw1	**2.262073**	**.0401754**	**.7847354**	
mhoutw2	**-.7510519**	**-.0076652**	**.0429848**	**.563854**

Means of exogenous variables

kappa	observed age	cumdose1	crhrw1	mhoutw2
mean	**49.97417**	**.3632373**	**.1067301**	**.0664207**