The CORR Procedure

clinic=1 treat=A

5 Variables:	y0	y1	y2	y3	y4

Covariance Matrix, DF = 26

	y0	y1	y2	y3	y4
y0	0.2307692308	0.1666666667	0.1025641026	0.1282051282	0.0769230769
y1	0.1666666667	0.2592592593	0.1039886040	0.1225071225	0.0683760684
y2	0.1025641026	0.1039886040	0.2507122507	0.1125356125	0.1495726496
y3	0.1282051282	0.1225071225	0.1125356125	0.2421652422	0.0940170940
y4	0.0769230769	0.0683760684	0.1495726496	0.0940170940	0.2564102564

Simple Statistics

Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
y0	27	0.33333	0.48038	9.00000	0	1.00000
y1	27	0.51852	0.50918	14.00000	0	1.00000
y2	27	0.59259	0.50071	16.00000	0	1.00000
y3	27	0.62963	0.49210	17.00000	0	1.00000
y4	27	0.44444	0.50637	12.00000	0	1.00000

Pearson Correlation Coefficients, N = 27
Prob > |r| under H0: Rho=0

	y0	y1	y2	y3	y4
y0	1.00000	0.68139 <.0001	0.42640 0.0266	0.54233 0.0035	0.31623 0.1081
y1	0.68139 <.0001	1.00000	0.40788 0.0347	0.48892 0.0097	0.26520 0.1813
y2	0.42640 0.0266	0.40788 0.0347	1.00000	0.45672 0.0166	0.58992 0.0012
y3	0.54233 0.0035	0.48892 0.0097	0.45672 0.0166	1.00000	0.37730 0.0524
y4	0.31623 0.1081	0.26520 0.1813	0.58992 0.0012	0.37730 0.0524	1.00000

The CORR Procedure

clinic=1 treat=P

5 Variables:	y0 y1 y2 y3 y4

Covariance Matrix, DF = 28					
	y0	y1	y2	y3	y4
y0	0.2216748768	0.1527093596	0.1391625616	0.1527093596	0.1145320197
y1	0.1527093596	0.2512315271	0.1379310345	0.1440886700	0.1527093596
y2	0.1391625616	0.1379310345	0.2339901478	0.1379310345	0.0677339901
y3	0.1527093596	0.1440886700	0.1379310345	0.2512315271	0.1527093596
y4	0.1145320197	0.1527093596	0.0677339901	0.1527093596	0.2216748768

Simple Statistics						
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
y0	29	0.31034	0.47082	9.00000	0	1.00000
y1	29	0.41379	0.50123	12.00000	0	1.00000
y2	29	0.34483	0.48373	10.00000	0	1.00000
y3	29	0.41379	0.50123	12.00000	0	1.00000
y4	29	0.31034	0.47082	9.00000	0	1.00000

Pearson Correlation Coefficients, N = 29 Prob > |r| under H0: Rho=0					
	y0	y1	y2	y3	y4
y0	1.00000	0.64710 0.0001	0.61103 0.0004	0.64710 0.0001	0.51667 0.0041
y1	0.64710 0.0001	1.00000	0.56889 0.0013	0.57353 0.0011	0.64710 0.0001
y2	0.61103 0.0004	0.56889 0.0013	1.00000	0.56889 0.0013	0.29741 0.1172
y3	0.64710 0.0001	0.57353 0.0011	0.56889 0.0013	1.00000	0.64710 0.0001
y4	0.51667 0.0041	0.64710 0.0001	0.29741 0.1172	0.64710 0.0001	1.00000

The CORR Procedure

clinic=2 treat=A

5 Variables:	y0 y1 y2 y3 y4

Covariance Matrix, DF = 26					
	y0	y1	y2	y3	y4
y0	0.2564102564	0.0854700855	0.0299145299	0.0683760684	0.0512820513
y1	0.0854700855	0.1310541311	0.0484330484	0.0484330484	0.0811965812
y2	0.0299145299	0.0484330484	0.1566951567	0.1182336182	0.0726495726
y3	0.0683760684	0.0484330484	0.1182336182	0.1566951567	0.0726495726
y4	0.0512820513	0.0811965812	0.0726495726	0.0726495726	0.1794871795

Simple Statistics						
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
y0	27	0.55556	0.50637	15.00000	0	1.00000
y1	27	0.85185	0.36201	23.00000	0	1.00000
y2	27	0.81481	0.39585	22.00000	0	1.00000
y3	27	0.81481	0.39585	22.00000	0	1.00000
y4	27	0.77778	0.42366	21.00000	0	1.00000

Pearson Correlation Coefficients, N = 27 Prob > |r| under H0: Rho=0					
	y0	y1	y2	y3	y4
y0	1.00000	0.46625 0.0142	0.14924 0.4575	0.34112 0.0816	0.23905 0.2298
y1	0.46625 0.0142	1.00000	0.33798 0.0847	0.33798 0.0847	0.52941 0.0045
y2	0.14924 0.4575	0.33798 0.0847	1.00000	0.75455 <.0001	0.43320 0.0240
y3	0.34112 0.0816	0.33798 0.0847	0.75455 <.0001	1.00000	0.43320 0.0240
y4	0.23905 0.2298	0.52941 0.0045	0.43320 0.0240	0.43320 0.0240	1.00000

The CORR Procedure

clinic=2 treat=P

5 Variables:	y0	y1	y2	y3	y4

Covariance Matrix, DF = 27					
	y0	y1	y2	y3	y4
y0	0.2473544974	0.0476190476	0.0264550265	0.0555555556	0.0846560847
y1	0.0476190476	0.2539682540	0.1164021164	0.0370370370	0.1058201058
y2	0.0264550265	0.1164021164	0.2539682540	0.1111111111	0.1534391534
y3	0.0555555556	0.0370370370	0.1111111111	0.2592592593	0.1851851852
y4	0.0846560847	0.1058201058	0.1534391534	0.1851851852	0.2539682540

Simple Statistics						
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
y0	28	0.60714	0.49735	17.00000	0	1.00000
y1	28	0.57143	0.50395	16.00000	0	1.00000
y2	28	0.42857	0.50395	12.00000	0	1.00000
y3	28	0.50000	0.50918	14.00000	0	1.00000
y4	28	0.57143	0.50395	16.00000	0	1.00000

Pearson Correlation Coefficients, N = 28 Prob > |r| under H0: Rho=0					
	y0	y1	y2	y3	y4
y0	1.00000	0.18999 0.3329	0.10555 0.5930	0.21938 0.2620	0.33776 0.0788
y1	0.18999 0.3329	1.00000	0.45833 0.0142	0.14434 0.4637	0.41667 0.0274
y2	0.10555 0.5930	0.45833 0.0142	1.00000	0.43301 0.0214	0.60417 0.0007
y3	0.21938 0.2620	0.14434 0.4637	0.43301 0.0214	1.00000	0.72169 <.0001
y4	0.33776 0.0788	0.41667 0.0274	0.60417 0.0007	0.72169 <.0001	1.00000

The GENMOD Procedure

Model Information	
Data Set	WORK.B
Distribution	Binomial
Link Function	Logit
Dependent Variable	y

Number of Observations Read	555
Number of Observations Used	555
Number of Events	298
Number of Trials	555

Class Level Information					
Class	**Value**	**Design Variables**			
time	**0**	0	0	0	0
	1	1	0	0	0
	2	0	1	0	0
	3	0	0	1	0
	4	0	0	0	1
treat	**A**	1			
	P	0			

Response Profile		
Ordered Value	**y**	**Total Frequency**
1	1	298
2	0	257

PROC GENMOD is modeling the probability that y='1'.

Parameter Information			
Parameter	**Effect**	**time**	**treat**
Prm1	Intercept		
Prm2	time	1	
Prm3	time	2	
Prm4	time	3	
Prm5	time	4	
Prm6	time*treat	1	A
Prm7	time*treat	2	A

The GENMOD Procedure

Parameter Information			
Parameter	**Effect**	**time**	**treat**
Prm8	time*treat	3	A
Prm9	time*treat	4	A

Algorithm converged.

GEE Model Information	
Correlation Structure	Independent
Subject Effect	id (111 levels)
Number of Clusters	111
Correlation Matrix Dimension	5
Maximum Cluster Size	5
Minimum Cluster Size	5

Algorithm converged.

GEE Fit Criteria	
QIC	751.4380
QICu	751.4380

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			**Estimate**	**Standard Error**	**95% Confidence Limits**		**Z**	**Pr > |Z|**
Intercept			-0.1989	0.1908	-0.5728	0.1751	-1.04	0.2972
time	1		0.1638	0.2734	-0.3722	0.6997	0.60	0.5492
time	2		-0.2655	0.2893	-0.8324	0.3015	-0.92	0.3588
time	3		0.0230	0.2748	-0.5156	0.5615	0.08	0.9334
time	4		-0.0480	0.2710	-0.5791	0.4831	-0.18	0.8594
time*treat	1	A	0.8128	0.3950	0.0386	1.5870	2.06	0.0396
time*treat	2	A	1.3293	0.4035	0.5384	2.1202	3.29	0.0010
time*treat	3	A	1.1314	0.4038	0.3400	1.9228	2.80	0.0051
time*treat	4	A	0.6988	0.3862	-0.0581	1.4558	1.81	0.0704

The GENMOD Procedure

Score Statistics For Joint Tests For GEE			
Source	**DF**	**Chi-Square**	**Pr > ChiSq**
time	4	3.22	0.5215
time*treat	4	12.79	0.0123

Note: Under full-rank parameterizations, Type 3 effect tests are replaced by joint tests. The joint test for an effect is a test that all the parameters associated with that effect are zero. Such joint tests might not be equivalent to Type 3 effect tests under GLM parameterization.

The CORR Procedure

clinic=1 treat=A

5 Variables:	y0	y1	y2	y3	y4

Covariance Matrix, DF = 26

	y0	y1	y2	y3	y4
y0	0.2307692308	0.1666666667	0.1025641026	0.1282051282	0.0769230769
y1	0.1666666667	0.2592592593	0.1039886040	0.1225071225	0.0683760684
y2	0.1025641026	0.1039886040	0.2507122507	0.1125356125	0.1495726496
y3	0.1282051282	0.1225071225	0.1125356125	0.2421652422	0.0940170940
y4	0.0769230769	0.0683760684	0.1495726496	0.0940170940	0.2564102564

Simple Statistics

Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
y0	27	0.33333	0.48038	9.00000	0	1.00000
y1	27	0.51852	0.50918	14.00000	0	1.00000
y2	27	0.59259	0.50071	16.00000	0	1.00000
y3	27	0.62963	0.49210	17.00000	0	1.00000
y4	27	0.44444	0.50637	12.00000	0	1.00000

Pearson Correlation Coefficients, N = 27
Prob > |r| under H0: Rho=0

	y0	y1	y2	y3	y4
y0	1.00000	0.68139 <.0001	0.42640 0.0266	0.54233 0.0035	0.31623 0.1081
y1	0.68139 <.0001	1.00000	0.40788 0.0347	0.48892 0.0097	0.26520 0.1813
y2	0.42640 0.0266	0.40788 0.0347	1.00000	0.45672 0.0166	0.58992 0.0012
y3	0.54233 0.0035	0.48892 0.0097	0.45672 0.0166	1.00000	0.37730 0.0524
y4	0.31623 0.1081	0.26520 0.1813	0.58992 0.0012	0.37730 0.0524	1.00000

The CORR Procedure

clinic=1 treat=P

5 Variables:	y0	y1	y2	y3	y4

Covariance Matrix, DF = 28					
	y0	y1	y2	y3	y4
y0	0.2216748768	0.1527093596	0.1391625616	0.1527093596	0.1145320197
y1	0.1527093596	0.2512315271	0.1379310345	0.1440886700	0.1527093596
y2	0.1391625616	0.1379310345	0.2339901478	0.1379310345	0.0677339901
y3	0.1527093596	0.1440886700	0.1379310345	0.2512315271	0.1527093596
y4	0.1145320197	0.1527093596	0.0677339901	0.1527093596	0.2216748768

Simple Statistics						
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
y0	29	0.31034	0.47082	9.00000	0	1.00000
y1	29	0.41379	0.50123	12.00000	0	1.00000
y2	29	0.34483	0.48373	10.00000	0	1.00000
y3	29	0.41379	0.50123	12.00000	0	1.00000
y4	29	0.31034	0.47082	9.00000	0	1.00000

Pearson Correlation Coefficients, N = 29 Prob > |r| under H0: Rho=0					
	y0	y1	y2	y3	y4
y0	1.00000	0.64710 0.0001	0.61103 0.0004	0.64710 0.0001	0.51667 0.0041
y1	0.64710 0.0001	1.00000	0.56889 0.0013	0.57353 0.0011	0.64710 0.0001
y2	0.61103 0.0004	0.56889 0.0013	1.00000	0.56889 0.0013	0.29741 0.1172
y3	0.64710 0.0001	0.57353 0.0011	0.56889 0.0013	1.00000	0.64710 0.0001
y4	0.51667 0.0041	0.64710 0.0001	0.29741 0.1172	0.64710 0.0001	1.00000

The CORR Procedure

clinic=2 treat=A

5 Variables:	y0 y1 y2 y3 y4

Covariance Matrix, DF = 26					
	y0	y1	y2	y3	y4
y0	0.2564102564	0.0854700855	0.0299145299	0.0683760684	0.0512820513
y1	0.0854700855	0.1310541311	0.0484330484	0.0484330484	0.0811965812
y2	0.0299145299	0.0484330484	0.1566951567	0.1182336182	0.0726495726
y3	0.0683760684	0.0484330484	0.1182336182	0.1566951567	0.0726495726
y4	0.0512820513	0.0811965812	0.0726495726	0.0726495726	0.1794871795

Simple Statistics						
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
y0	27	0.55556	0.50637	15.00000	0	1.00000
y1	27	0.85185	0.36201	23.00000	0	1.00000
y2	27	0.81481	0.39585	22.00000	0	1.00000
y3	27	0.81481	0.39585	22.00000	0	1.00000
y4	27	0.77778	0.42366	21.00000	0	1.00000

Pearson Correlation Coefficients, N = 27 Prob > |r| under H0: Rho=0					
	y0	y1	y2	y3	y4
y0	1.00000	0.46625 0.0142	0.14924 0.4575	0.34112 0.0816	0.23905 0.2298
y1	0.46625 0.0142	1.00000	0.33798 0.0847	0.33798 0.0847	0.52941 0.0045
y2	0.14924 0.4575	0.33798 0.0847	1.00000	0.75455 <.0001	0.43320 0.0240
y3	0.34112 0.0816	0.33798 0.0847	0.75455 <.0001	1.00000	0.43320 0.0240
y4	0.23905 0.2298	0.52941 0.0045	0.43320 0.0240	0.43320 0.0240	1.00000

The CORR Procedure

clinic=2 treat=P

5 Variables:	y0	y1	y2	y3	y4

Covariance Matrix, DF = 27					
	y0	y1	y2	y3	y4
y0	0.2473544974	0.0476190476	0.0264550265	0.0555555556	0.0846560847
y1	0.0476190476	0.2539682540	0.1164021164	0.0370370370	0.1058201058
y2	0.0264550265	0.1164021164	0.2539682540	0.1111111111	0.1534391534
y3	0.0555555556	0.0370370370	0.1111111111	0.2592592593	0.1851851852
y4	0.0846560847	0.1058201058	0.1534391534	0.1851851852	0.2539682540

Simple Statistics						
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
y0	28	0.60714	0.49735	17.00000	0	1.00000
y1	28	0.57143	0.50395	16.00000	0	1.00000
y2	28	0.42857	0.50395	12.00000	0	1.00000
y3	28	0.50000	0.50918	14.00000	0	1.00000
y4	28	0.57143	0.50395	16.00000	0	1.00000

Pearson Correlation Coefficients, N = 28 Prob > |r| under H0: Rho=0					
	y0	y1	y2	y3	y4
y0	1.00000	0.18999 0.3329	0.10555 0.5930	0.21938 0.2620	0.33776 0.0788
y1	0.18999 0.3329	1.00000	0.45833 0.0142	0.14434 0.4637	0.41667 0.0274
y2	0.10555 0.5930	0.45833 0.0142	1.00000	0.43301 0.0214	0.60417 0.0007
y3	0.21938 0.2620	0.14434 0.4637	0.43301 0.0214	1.00000	0.72169 <.0001
y4	0.33776 0.0788	0.41667 0.0274	0.60417 0.0007	0.72169 <.0001	1.00000

The GENMOD Procedure

Model Information	
Data Set	WORK.B
Distribution	Binomial
Link Function	Logit
Dependent Variable	y

Number of Observations Read	555
Number of Observations Used	555
Number of Events	298
Number of Trials	555

Class Level Information					
Class	**Value**	**Design Variables**			
time	**0**	0	0	0	0
	1	1	0	0	0
	2	0	1	0	0
	3	0	0	1	0
	4	0	0	0	1
treat	**A**	1			
	P	0			

Response Profile		
Ordered Value	**y**	**Total Frequency**
1	1	298
2	0	257

PROC GENMOD is modeling the probability that y='1'.

Parameter Information			
Parameter	**Effect**	**time**	**treat**
Prm1	Intercept		
Prm2	time	1	
Prm3	time	2	
Prm4	time	3	
Prm5	time	4	
Prm6	time*treat	1	A
Prm7	time*treat	2	A

The GENMOD Procedure

Parameter Information			
Parameter	**Effect**	**time**	**treat**
Prm8	time*treat	3	A
Prm9	time*treat	4	A

Algorithm converged.

GEE Model Information	
Correlation Structure	Independent
Subject Effect	id (111 levels)
Number of Clusters	111
Correlation Matrix Dimension	5
Maximum Cluster Size	5
Minimum Cluster Size	5

Algorithm converged.

GEE Fit Criteria	
QIC	751.4380
QICu	751.4380

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			**Estimate**	**Standard Error**	**95% Confidence Limits**		**Z**	**Pr > |Z|**
Intercept			-0.1989	0.1908	-0.5728	0.1751	-1.04	0.2972
time	1		0.1638	0.2734	-0.3722	0.6997	0.60	0.5492
time	2		-0.2655	0.2893	-0.8324	0.3015	-0.92	0.3588
time	3		0.0230	0.2748	-0.5156	0.5615	0.08	0.9334
time	4		-0.0480	0.2710	-0.5791	0.4831	-0.18	0.8594
time*treat	1	A	0.8128	0.3950	0.0386	1.5870	2.06	0.0396
time*treat	2	A	1.3293	0.4035	0.5384	2.1202	3.29	0.0010
time*treat	3	A	1.1314	0.4038	0.3400	1.9228	2.80	0.0051
time*treat	4	A	0.6988	0.3862	-0.0581	1.4558	1.81	0.0704

The GENMOD Procedure

Score Statistics For Joint Tests For GEE			
Source	**DF**	**Chi-Square**	**Pr > ChiSq**
time	4	3.22	0.5215
time*treat	4	12.79	0.0123

Note: Under full-rank parameterizations, Type 3 effect tests are replaced by joint tests. The joint test for an effect is a test that all the parameters associated with that effect are zero. Such joint tests might not be equivalent to Type 3 effect tests under GLM parameterization.

The CORR Procedure

clinic=1 treat=A

5 Variables:	y0	y1	y2	y3	y4

Covariance Matrix, DF = 26					
	y0	y1	y2	y3	y4
y0	0.2307692308	0.1666666667	0.1025641026	0.1282051282	0.0769230769
y1	0.1666666667	0.2592592593	0.1039886040	0.1225071225	0.0683760684
y2	0.1025641026	0.1039886040	0.2507122507	0.1125356125	0.1495726496
y3	0.1282051282	0.1225071225	0.1125356125	0.2421652422	0.0940170940
y4	0.0769230769	0.0683760684	0.1495726496	0.0940170940	0.2564102564

Simple Statistics						
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
y0	27	0.33333	0.48038	9.00000	0	1.00000
y1	27	0.51852	0.50918	14.00000	0	1.00000
y2	27	0.59259	0.50071	16.00000	0	1.00000
y3	27	0.62963	0.49210	17.00000	0	1.00000
y4	27	0.44444	0.50637	12.00000	0	1.00000

Pearson Correlation Coefficients, N = 27 Prob > |r| under H0: Rho=0					
	y0	y1	y2	y3	y4
y0	1.00000	0.68139 <.0001	0.42640 0.0266	0.54233 0.0035	0.31623 0.1081
y1	0.68139 <.0001	1.00000	0.40788 0.0347	0.48892 0.0097	0.26520 0.1813
y2	0.42640 0.0266	0.40788 0.0347	1.00000	0.45672 0.0166	0.58992 0.0012
y3	0.54233 0.0035	0.48892 0.0097	0.45672 0.0166	1.00000	0.37730 0.0524
y4	0.31623 0.1081	0.26520 0.1813	0.58992 0.0012	0.37730 0.0524	1.00000

The CORR Procedure

clinic=1 treat=P

5 Variables:	y0	y1	y2	y3	y4

Covariance Matrix, DF = 28					
	y0	y1	y2	y3	y4
y0	0.2216748768	0.1527093596	0.1391625616	0.1527093596	0.1145320197
y1	0.1527093596	0.2512315271	0.1379310345	0.1440886700	0.1527093596
y2	0.1391625616	0.1379310345	0.2339901478	0.1379310345	0.0677339901
y3	0.1527093596	0.1440886700	0.1379310345	0.2512315271	0.1527093596
y4	0.1145320197	0.1527093596	0.0677339901	0.1527093596	0.2216748768

Simple Statistics						
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
y0	29	0.31034	0.47082	9.00000	0	1.00000
y1	29	0.41379	0.50123	12.00000	0	1.00000
y2	29	0.34483	0.48373	10.00000	0	1.00000
y3	29	0.41379	0.50123	12.00000	0	1.00000
y4	29	0.31034	0.47082	9.00000	0	1.00000

Pearson Correlation Coefficients, N = 29 Prob > |r| under H0: Rho=0					
	y0	y1	y2	y3	y4
y0	1.00000	0.64710 0.0001	0.61103 0.0004	0.64710 0.0001	0.51667 0.0041
y1	0.64710 0.0001	1.00000	0.56889 0.0013	0.57353 0.0011	0.64710 0.0001
y2	0.61103 0.0004	0.56889 0.0013	1.00000	0.56889 0.0013	0.29741 0.1172
y3	0.64710 0.0001	0.57353 0.0011	0.56889 0.0013	1.00000	0.64710 0.0001
y4	0.51667 0.0041	0.64710 0.0001	0.29741 0.1172	0.64710 0.0001	1.00000

The CORR Procedure

clinic=2 treat=A

5 Variables:	y0 y1 y2 y3 y4

Covariance Matrix, DF = 26					
	y0	y1	y2	y3	y4
y0	0.2564102564	0.0854700855	0.0299145299	0.0683760684	0.0512820513
y1	0.0854700855	0.1310541311	0.0484330484	0.0484330484	0.0811965812
y2	0.0299145299	0.0484330484	0.1566951567	0.1182336182	0.0726495726
y3	0.0683760684	0.0484330484	0.1182336182	0.1566951567	0.0726495726
y4	0.0512820513	0.0811965812	0.0726495726	0.0726495726	0.1794871795

Simple Statistics						
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
y0	27	0.55556	0.50637	15.00000	0	1.00000
y1	27	0.85185	0.36201	23.00000	0	1.00000
y2	27	0.81481	0.39585	22.00000	0	1.00000
y3	27	0.81481	0.39585	22.00000	0	1.00000
y4	27	0.77778	0.42366	21.00000	0	1.00000

Pearson Correlation Coefficients, N = 27 Prob > |r| under H0: Rho=0					
	y0	y1	y2	y3	y4
y0	1.00000	0.46625 0.0142	0.14924 0.4575	0.34112 0.0816	0.23905 0.2298
y1	0.46625 0.0142	1.00000	0.33798 0.0847	0.33798 0.0847	0.52941 0.0045
y2	0.14924 0.4575	0.33798 0.0847	1.00000	0.75455 <.0001	0.43320 0.0240
y3	0.34112 0.0816	0.33798 0.0847	0.75455 <.0001	1.00000	0.43320 0.0240
y4	0.23905 0.2298	0.52941 0.0045	0.43320 0.0240	0.43320 0.0240	1.00000

The CORR Procedure

clinic=2 treat=P

5 Variables:	y0	y1	y2	y3	y4

Covariance Matrix, DF = 27					
	y0	y1	y2	y3	y4
y0	0.2473544974	0.0476190476	0.0264550265	0.0555555556	0.0846560847
y1	0.0476190476	0.2539682540	0.1164021164	0.0370370370	0.1058201058
y2	0.0264550265	0.1164021164	0.2539682540	0.1111111111	0.1534391534
y3	0.0555555556	0.0370370370	0.1111111111	0.2592592593	0.1851851852
y4	0.0846560847	0.1058201058	0.1534391534	0.1851851852	0.2539682540

Simple Statistics						
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
y0	28	0.60714	0.49735	17.00000	0	1.00000
y1	28	0.57143	0.50395	16.00000	0	1.00000
y2	28	0.42857	0.50395	12.00000	0	1.00000
y3	28	0.50000	0.50918	14.00000	0	1.00000
y4	28	0.57143	0.50395	16.00000	0	1.00000

Pearson Correlation Coefficients, N = 28 Prob > |r| under H0: Rho=0					
	y0	y1	y2	y3	y4
y0	1.00000	0.18999 0.3329	0.10555 0.5930	0.21938 0.2620	0.33776 0.0788
y1	0.18999 0.3329	1.00000	0.45833 0.0142	0.14434 0.4637	0.41667 0.0274
y2	0.10555 0.5930	0.45833 0.0142	1.00000	0.43301 0.0214	0.60417 0.0007
y3	0.21938 0.2620	0.14434 0.4637	0.43301 0.0214	1.00000	0.72169 <.0001
y4	0.33776 0.0788	0.41667 0.0274	0.60417 0.0007	0.72169 <.0001	1.00000

The GENMOD Procedure

Model Information	
Data Set	WORK.B
Distribution	Binomial
Link Function	Logit
Dependent Variable	y

Number of Observations Read	555
Number of Observations Used	555
Number of Events	298
Number of Trials	555

Class Level Information					
Class	**Value**	**Design Variables**			
time	**0**	0	0	0	0
	1	1	0	0	0
	2	0	1	0	0
	3	0	0	1	0
	4	0	0	0	1
treat	**A**	1			
	P	0			

Response Profile		
Ordered Value	**y**	**Total Frequency**
1	1	298
2	0	257

PROC GENMOD is modeling the probability that y='1'.

Parameter Information			
Parameter	**Effect**	**time**	**treat**
Prm1	Intercept		
Prm2	time	1	
Prm3	time	2	
Prm4	time	3	
Prm5	time	4	
Prm6	time*treat	1	A
Prm7	time*treat	2	A

The GENMOD Procedure

Parameter Information			
Parameter	**Effect**	**time**	**treat**
Prm8	time*treat	3	A
Prm9	time*treat	4	A

Algorithm converged.

GEE Model Information	
Correlation Structure	Independent
Subject Effect	id (111 levels)
Number of Clusters	111
Correlation Matrix Dimension	5
Maximum Cluster Size	5
Minimum Cluster Size	5

Algorithm converged.

GEE Fit Criteria	
QIC	751.4380
QICu	751.4380

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			**Estimate**	**Standard Error**	**95% Confidence Limits**		**Z**	**Pr > |Z|**
Intercept			-0.1989	0.1908	-0.5728	0.1751	-1.04	0.2972
time	1		0.1638	0.2734	-0.3722	0.6997	0.60	0.5492
time	2		-0.2655	0.2893	-0.8324	0.3015	-0.92	0.3588
time	3		0.0230	0.2748	-0.5156	0.5615	0.08	0.9334
time	4		-0.0480	0.2710	-0.5791	0.4831	-0.18	0.8594
time*treat	1	A	0.8128	0.3950	0.0386	1.5870	2.06	0.0396
time*treat	2	A	1.3293	0.4035	0.5384	2.1202	3.29	0.0010
time*treat	3	A	1.1314	0.4038	0.3400	1.9228	2.80	0.0051
time*treat	4	A	0.6988	0.3862	-0.0581	1.4558	1.81	0.0704

The GENMOD Procedure

Score Statistics For Joint Tests For GEE			
Source	**DF**	**Chi-Square**	**Pr > ChiSq**
time	4	3.22	0.5215
time*treat	4	12.79	0.0123

Note: Under full-rank parameterizations, Type 3 effect tests are replaced by joint tests. The joint test for an effect is a test that all the parameters associated with that effect are zero. Such joint tests might not be equivalent to Type 3 effect tests under GLM parameterization.

The CORR Procedure

clinic=1 treat=A

5 Variables:	y0	y1	y2	y3	y4

Covariance Matrix, DF = 26					
	y0	y1	y2	y3	y4
y0	0.2307692308	0.1666666667	0.1025641026	0.1282051282	0.0769230769
y1	0.1666666667	0.2592592593	0.1039886040	0.1225071225	0.0683760684
y2	0.1025641026	0.1039886040	0.2507122507	0.1125356125	0.1495726496
y3	0.1282051282	0.1225071225	0.1125356125	0.2421652422	0.0940170940
y4	0.0769230769	0.0683760684	0.1495726496	0.0940170940	0.2564102564

Simple Statistics						
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
y0	27	0.33333	0.48038	9.00000	0	1.00000
y1	27	0.51852	0.50918	14.00000	0	1.00000
y2	27	0.59259	0.50071	16.00000	0	1.00000
y3	27	0.62963	0.49210	17.00000	0	1.00000
y4	27	0.44444	0.50637	12.00000	0	1.00000

Pearson Correlation Coefficients, N = 27 Prob > |r| under H0: Rho=0					
	y0	y1	y2	y3	y4
y0	1.00000	0.68139 <.0001	0.42640 0.0266	0.54233 0.0035	0.31623 0.1081
y1	0.68139 <.0001	1.00000	0.40788 0.0347	0.48892 0.0097	0.26520 0.1813
y2	0.42640 0.0266	0.40788 0.0347	1.00000	0.45672 0.0166	0.58992 0.0012
y3	0.54233 0.0035	0.48892 0.0097	0.45672 0.0166	1.00000	0.37730 0.0524
y4	0.31623 0.1081	0.26520 0.1813	0.58992 0.0012	0.37730 0.0524	1.00000

The CORR Procedure

clinic=1 treat=P

5 Variables:	y0	y1	y2	y3	y4

Covariance Matrix, DF = 28					
	y0	y1	y2	y3	y4
y0	0.2216748768	0.1527093596	0.1391625616	0.1527093596	0.1145320197
y1	0.1527093596	0.2512315271	0.1379310345	0.1440886700	0.1527093596
y2	0.1391625616	0.1379310345	0.2339901478	0.1379310345	0.0677339901
y3	0.1527093596	0.1440886700	0.1379310345	0.2512315271	0.1527093596
y4	0.1145320197	0.1527093596	0.0677339901	0.1527093596	0.2216748768

Simple Statistics						
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
y0	29	0.31034	0.47082	9.00000	0	1.00000
y1	29	0.41379	0.50123	12.00000	0	1.00000
y2	29	0.34483	0.48373	10.00000	0	1.00000
y3	29	0.41379	0.50123	12.00000	0	1.00000
y4	29	0.31034	0.47082	9.00000	0	1.00000

Pearson Correlation Coefficients, N = 29 Prob > |r| under H0: Rho=0					
	y0	y1	y2	y3	y4
y0	1.00000	0.64710 0.0001	0.61103 0.0004	0.64710 0.0001	0.51667 0.0041
y1	0.64710 0.0001	1.00000	0.56889 0.0013	0.57353 0.0011	0.64710 0.0001
y2	0.61103 0.0004	0.56889 0.0013	1.00000	0.56889 0.0013	0.29741 0.1172
y3	0.64710 0.0001	0.57353 0.0011	0.56889 0.0013	1.00000	0.64710 0.0001
y4	0.51667 0.0041	0.64710 0.0001	0.29741 0.1172	0.64710 0.0001	1.00000

The CORR Procedure

clinic=2 treat=A

5 Variables:	y0 y1 y2 y3 y4

Covariance Matrix, DF = 26					
	y0	y1	y2	y3	y4
y0	0.2564102564	0.0854700855	0.0299145299	0.0683760684	0.0512820513
y1	0.0854700855	0.1310541311	0.0484330484	0.0484330484	0.0811965812
y2	0.0299145299	0.0484330484	0.1566951567	0.1182336182	0.0726495726
y3	0.0683760684	0.0484330484	0.1182336182	0.1566951567	0.0726495726
y4	0.0512820513	0.0811965812	0.0726495726	0.0726495726	0.1794871795

Simple Statistics						
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
y0	27	0.55556	0.50637	15.00000	0	1.00000
y1	27	0.85185	0.36201	23.00000	0	1.00000
y2	27	0.81481	0.39585	22.00000	0	1.00000
y3	27	0.81481	0.39585	22.00000	0	1.00000
y4	27	0.77778	0.42366	21.00000	0	1.00000

Pearson Correlation Coefficients, N = 27 Prob > |r| under H0: Rho=0					
	y0	y1	y2	y3	y4
y0	1.00000	0.46625 0.0142	0.14924 0.4575	0.34112 0.0816	0.23905 0.2298
y1	0.46625 0.0142	1.00000	0.33798 0.0847	0.33798 0.0847	0.52941 0.0045
y2	0.14924 0.4575	0.33798 0.0847	1.00000	0.75455 <.0001	0.43320 0.0240
y3	0.34112 0.0816	0.33798 0.0847	0.75455 <.0001	1.00000	0.43320 0.0240
y4	0.23905 0.2298	0.52941 0.0045	0.43320 0.0240	0.43320 0.0240	1.00000

The CORR Procedure

clinic=2 treat=P

5 Variables:	y0	y1	y2	y3	y4

Covariance Matrix, DF = 27					
	y0	y1	y2	y3	y4
y0	0.2473544974	0.0476190476	0.0264550265	0.0555555556	0.0846560847
y1	0.0476190476	0.2539682540	0.1164021164	0.0370370370	0.1058201058
y2	0.0264550265	0.1164021164	0.2539682540	0.1111111111	0.1534391534
y3	0.0555555556	0.0370370370	0.1111111111	0.2592592593	0.1851851852
y4	0.0846560847	0.1058201058	0.1534391534	0.1851851852	0.2539682540

Simple Statistics						
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
y0	28	0.60714	0.49735	17.00000	0	1.00000
y1	28	0.57143	0.50395	16.00000	0	1.00000
y2	28	0.42857	0.50395	12.00000	0	1.00000
y3	28	0.50000	0.50918	14.00000	0	1.00000
y4	28	0.57143	0.50395	16.00000	0	1.00000

Pearson Correlation Coefficients, N = 28 Prob > |r| under H0: Rho=0					
	y0	y1	y2	y3	y4
y0	1.00000	0.18999 0.3329	0.10555 0.5930	0.21938 0.2620	0.33776 0.0788
y1	0.18999 0.3329	1.00000	0.45833 0.0142	0.14434 0.4637	0.41667 0.0274
y2	0.10555 0.5930	0.45833 0.0142	1.00000	0.43301 0.0214	0.60417 0.0007
y3	0.21938 0.2620	0.14434 0.4637	0.43301 0.0214	1.00000	0.72169 <.0001
y4	0.33776 0.0788	0.41667 0.0274	0.60417 0.0007	0.72169 <.0001	1.00000

The GENMOD Procedure

Model Information	
Data Set	WORK.B
Distribution	Binomial
Link Function	Logit
Dependent Variable	y

Number of Observations Read	555
Number of Observations Used	555
Number of Events	298
Number of Trials	555

Class Level Information					
Class	**Value**	**Design Variables**			
time	**0**	0	0	0	0
	1	1	0	0	0
	2	0	1	0	0
	3	0	0	1	0
	4	0	0	0	1
treat	**A**	1			
	P	0			

Response Profile		
Ordered Value	**y**	**Total Frequency**
1	1	298
2	0	257

PROC GENMOD is modeling the probability that y='1'.

Parameter Information			
Parameter	**Effect**	**time**	**treat**
Prm1	Intercept		
Prm2	time	1	
Prm3	time	2	
Prm4	time	3	
Prm5	time	4	
Prm6	time*treat	1	A
Prm7	time*treat	2	A

The GENMOD Procedure

Parameter Information			
Parameter	**Effect**	**time**	**treat**
Prm8	time*treat	3	A
Prm9	time*treat	4	A

Algorithm converged.

GEE Model Information	
Correlation Structure	Independent
Subject Effect	id (111 levels)
Number of Clusters	111
Correlation Matrix Dimension	5
Maximum Cluster Size	5
Minimum Cluster Size	5

Algorithm converged.

GEE Fit Criteria	
QIC	751.4380
QICu	751.4380

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			**Estimate**	**Standard Error**	**95% Confidence Limits**		**Z**	**Pr > |Z|**
Intercept			-0.1989	0.1908	-0.5728	0.1751	-1.04	0.2972
time	1		0.1638	0.2734	-0.3722	0.6997	0.60	0.5492
time	2		-0.2655	0.2893	-0.8324	0.3015	-0.92	0.3588
time	3		0.0230	0.2748	-0.5156	0.5615	0.08	0.9334
time	4		-0.0480	0.2710	-0.5791	0.4831	-0.18	0.8594
time*treat	1	A	0.8128	0.3950	0.0386	1.5870	2.06	0.0396
time*treat	2	A	1.3293	0.4035	0.5384	2.1202	3.29	0.0010
time*treat	3	A	1.1314	0.4038	0.3400	1.9228	2.80	0.0051
time*treat	4	A	0.6988	0.3862	-0.0581	1.4558	1.81	0.0704

The GENMOD Procedure

Score Statistics For Joint Tests For GEE			
Source	**DF**	**Chi-Square**	**Pr > ChiSq**
time	4	3.22	0.5215
time*treat	4	12.79	0.0123

Note: Under full-rank parameterizations, Type 3 effect tests are replaced by joint tests. The joint test for an effect is a test that all the parameters associated with that effect are zero. Such joint tests might not be equivalent to Type 3 effect tests under GLM parameterization.