The LOGISTIC Procedure

Model Information						
Data Set						
Response Variable	Informed_Consent	Informed_Consent				
Number of Response Levels	2					
Model	binary logit					
Optimization Technique	Fisher's scoring					
Likelihood Penalty	Firth's bias correction					

Number of Observations Read	781
Number of Observations Used	781

Response Profile						
Ordered Value						
1	1	426				
2	0	355				

Probability modeled is Informed_Consent='1'.

Class Level Information							
Class	Value	Design Variables					5
Psych_Symptoms	0	0					
	1	1					
Edu_Level	0	0	0	0	0	0	0
	1	1	0	0	0	0	0
	2	0	1	0	0	0	0
	3	0	0	1	0	0	0
	4	0	0	0	1	0	0
	5	0	0	0	0	1	0
	6	0	0	0	0	0	1
Alcohol_Cons	0	0					
	1	1					
Police_Inv	0	0					
	1	1					
Prim_Diag	0	0	0	0	0	0	0
	1	1	0	0	0	0	0
	2	0	1	0	0	0	0
	3	0	0	1	0	0	0
	4	0	0	0	1	0	0
	5	0	0	0	0	1	0
	6	0	0	0	0	0	1
Marital_Status	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		
Comorbid	0	0					
	1	1					
Agg_Behaviorc	0	0					
	1	1					

Class Level Information							
Class	Value	Value Design Variables					
Inv_Req	0	0 0 0 0 0					
	1	1 0 0 0 0					
	2	0 1 0 0 0					
	3	0 0 1 0 0					
	4	0	0	0	1	0	
	5	0	0	0	0	1	

Intercept-Only Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics						
Criterion	Intercept Only	Intercept and Covariates				
AIC	999.546	808.985				
SC	1004.207	934.820				
-2 Log L	997.546	754.985				

Testing Global Null Hypothesis: BETA=0								
Test Chi-Square DF Pr > ChiSq								
Likelihood Ratio	242.5614	26	<.0001					
Score	228.3344	26	<.0001					
Wald	172.5544	26	<.0001					

Type 3 Analysis of Effects							
Effect	DF	Wald Chi-Square	Pr > ChiSq				
Psych_Symptoms	1	3.1369	0.0765				
Edu_Level	6	21.2274	0.0017				
Alcohol_Cons	1	5.2815	0.0216				
Police_Inv	1	2.7103	0.0997				
Prim_Diag	6	28.6788	<.0001				
Marital_Status	4	1.8792	0.7580				
Comorbid	1	0.8898	0.3455				
Agg_Behaviorc	1	1.4622	0.2266				
Inv_Req	5	12.1711	0.0325				

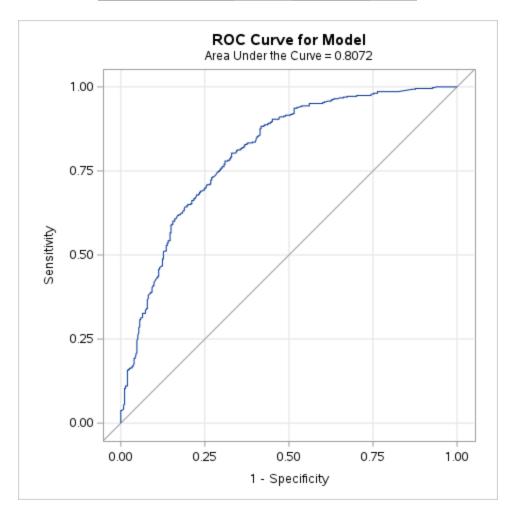
Analysis of Penalized Maximum Likelihood Estimates								
Parameter		DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq		
Intercept		1	-0.8903	0.5866	2.3037	0.1291		
Psych_Symptoms	1	1	0.4370	0.2467	3.1369	0.0765		
Edu_Level	1	1	1.1625	0.4001	<u>8.4410</u>	0.0037		
Edu_Level	2	1	1.0179	0.4057	6.2944	0.0121		
Edu_Level	3	1	1.4677	0.4083	12.9228	0.0003		
Edu_Level	4	1	0.4900	0.4385	1.2491	0.2637		
Edu_Level	5	1	1.4237	0.4413	10.4073	0.0013		
Edu_Level	6	1	0.8520	0.5327	2.5579	0.1097		

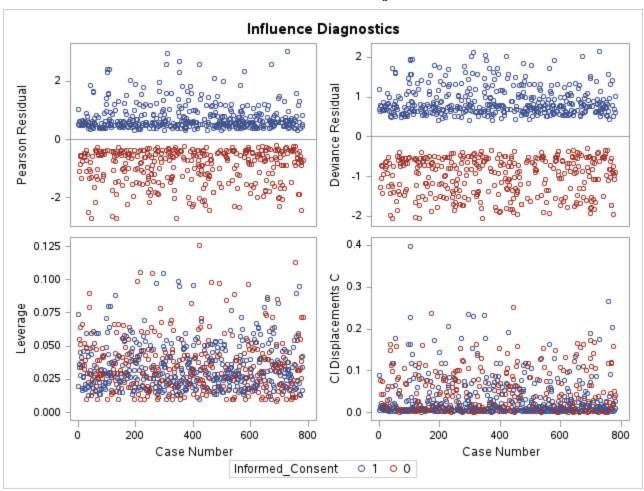
Analysis of Penalized Maximum Likelihood Estimates								
Parameter		DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq		
Alcohol_Cons	1	1	-0.5615	0.2443	<u>5.2815</u>	0.0216		
Police_Inv	1	1	0.3932	0.2388	2.7103	0.0997		
Prim_Diag	1	1	-1.0696	0.3755	8.1130	0.0044		
Prim_Diag	2	1	0.5819	0.3325	3.0624	0.0801		
Prim_Diag	3	1	0.5498	0.3674	2.2395	0.1345		
Prim_Diag	4	1	-0.7430	0.5990	1.5384	0.2149		
Prim_Diag	5	1	-0.3801	0.3623	1.1011	0.2940		
Prim_Diag	6	1	-0.7118	0.5564	1.6370	0.2007		
Marital_Status	1	1	0.4195	0.3130	1.7962	0.1802		
Marital_Status	2	1	0.2549	0.3563	0.5118	0.4744		
Marital_Status	3	1	0.2418	0.4686	0.2662	0.6059		
Marital_Status	4	1	0.1943	0.2314	0.7051	0.4011		
Comorbid	1	1	-0.1927	0.2043	0.8898	0.3455		
Agg_Behaviorc	1	1	-0.2419	0.2000	1.4622	0.2266		
Inv_Req	1	1	-0.4215	0.3417	1.5217	0.2174		
Inv_Req	2	1	0.1606	0.3589	0.2003	0.6545		
Inv_Req	3	1	-0.6782	0.4084	2.7572	0.0968		
Inv_Req	4	1	0.2123	0.3566	0.3542	0.5517		
Inv_Req	5	1	-0.6934	0.2713	6.5317	0.0106		

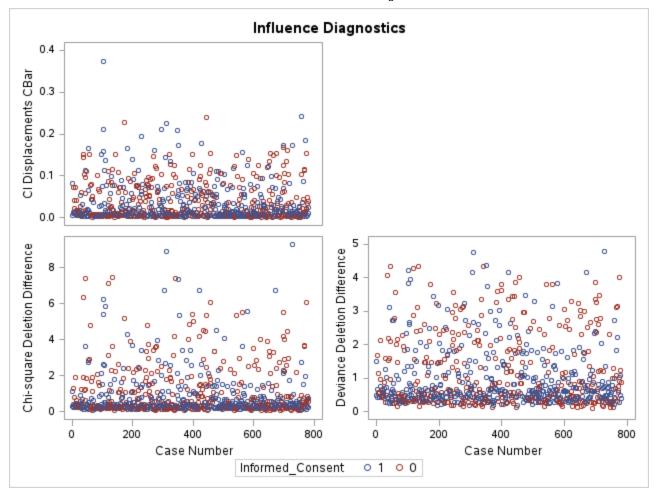
Odds Ratio Estimates							
Effect	Point Estimate	95% Wald Confidence Limits					
Psych_Symptoms 1 vs 0	1.548	0.954 2.51					
Edu_Level 1 vs 0	3.198	1.460	7.006				
Edu_Level 2 vs 0	2.767	1.249	6.130				
Edu_Level 3 vs 0	4.339	1.949	9.660				
Edu_Level 4 vs 0	1.632	0.691	3.855				
Edu_Level 5 vs 0	4.153	1.748	9.862				
Edu_Level 6 vs 0	2.344	0.825	6.660				
Alcohol_Cons 1 vs 0	0.570	0.353	0.921				
Police_Inv 1 vs 0	1.482	0.928	2.366				
Prim_Diag 1 vs 0	0.343	0.164	0.716				
Prim_Diag 2 vs 0	1.790	0.933	3.434				
Prim_Diag 3 vs 0	1.733	0.843	3.561				
Prim_Diag 4 vs 0	0.476	0.147	1.539				
Prim_Diag 5 vs 0	0.684	0.336	1.391				
Prim_Diag 6 vs 0	0.491	0.165	1.460				
Marital_Status 1 vs 0	1.521	0.824	2.809				
Marital_Status 2 vs 0	1.290	0.642	2.594				
Marital_Status 3 vs 0	1.274	0.508	3.191				
Marital_Status 4 vs 0	1.214	0.772	1.912				
Comorbid 1 vs 0	0.825	0.553	1.231				
Agg_Behaviorc 1 vs 0	0.785	0.531	1.162				
Inv_Req 1 vs 0	0.656	0.336	1.282				
Inv_Req 2 vs 0	1.174	0.581	2.373				
Inv_Req 3 vs 0	0.508	0.228	1.130				
Inv_Req 4 vs 0	1.236	0.615	2.487				

Odds Ratio Estimates							
Effect Point Estimate Confidence Limits							
Inv_Req 5 vs 0	5 vs 0 0.500 0.294 0.8						

Association of Predicted Probabilities and Observed Responses							
Percent Concordant	80.7	Somers' D	0.614				
Percent Discordant	19.2	Gamma	0.615				
Percent Tied	0.1	Tau-a	0.305				
Pairs	151230	С	0.807				







Area Under the Curve (AUC) with Interaction Terms

Obs	Label1	cValue1	nValue1	Label2	cValue2	nValue2
1	Percent Concordant	80.7	80.676453	Somers' D	0.614	0.614389
2	Percent Discordant	19.2	19.237585	Gamma	0.615	0.614917
3	Percent Tied	0.1	0.085962	Tau-a	0.305	0.305046
4	Pairs	151230	151230	С	0.807	0.807194