The SAS System

The LOGISTIC Procedure

Model Information	
Data Set	WORK.CRCDUMMY
Response Variable	FRFullAdhe
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Number of Observations Read	15944
Number of Observations Used	15302

Response Profile		
Ordered Value	FRFullAdhe	Total Frequency
1	0	8532
2	1	6770

Probability modeled is FRFullAdhe='1'.

Note: 642 observations were deleted due to missing values for the response or explanatory variables.

Class Level Information		
Class	Value	Design Variables
Gender	F	1
	M	0

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

Model Fit Statistics		
Criterion	Intercept Only	Intercept and Covariates
AIC	21011.734	20784.127
SC	21019.370	20898.663
-2 Log L	21009.734	20754.127

Testing Global Null Hypothesis: BETA=0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	255.6074	14	<.0001
Score	253.6459	14	<.0001
Wald	249.4501	14	<.0001

Type 3 Analysis of Effects			
Effect	DF	Wald Chi-Square	Pr > ChiSq
Age5059	1	28.1020	<.0001
Age6064	1	4.2782	0.0386
Gender	1	1.9742	0.1600
RaceAm	1	2.5870	0.1077
RaceA	1	15.0369	0.0001
RaceB	1	1.3121	0.2520
RaceN	1	6.4960	0.0108
RaceD	1	0.7716	0.3797
RaceU	1	0.3537	0.5520
cEvent_1y	1	31.6239	<.0001
cHosp_1y	1	6.5908	0.0103
tCCI	1	12.4774	0.0004
IncomeM	1	0.0977	0.7546
IncomeH	1	7.5561	0.0060

Analysis of Maximum Likelihood Estimates						
Parameter		DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept		1	0.1284	0.0492	6.7951	0.0091
Age5059		1	-0.2155	0.0407	28.1020	<.0001
Age6064		1	-0.0853	0.0413	4.2782	0.0386
Gender	F	1	0.1012	0.0721	1.9742	0.1600
RaceAm		1	-0.2341	0.1456	2.5870	0.1077
RaceA		1	0.4682	0.1207	15.0369	0.0001
RaceB		1	-0.0539	0.0471	1.3121	0.2520
RaceN		1	-0.2938	0.1153	6.4960	0.0108
RaceD		1	0.0551	0.0627	0.7716	0.3797

RaceU		1	0.0647	0.1088	0.3537	0.5520
cEvent_1y		1	-0.0107	0.00190	31.6239	<.0001
cHosp_1y		1	0.00503	0.00196	6.5908	0.0103
tCCI		1	-0.0429	0.0122	12.4774	0.0004
IncomeM		1	0.0128	0.0409	0.0977	0.7546
IncomeH		1	0.1097	0.0399	7.5561	0.0060

Odds Ratio Estimates			
Effect	Point Estimate	95% Wald Confidence Limits	
Age5059	0.806	0.744	0.873
Age6064	0.918	0.847	0.996
Gender F vs M	1.107	0.961	1.274
RaceAm	0.791	0.595	1.052
RaceA	1.597	1.261	2.023
RaceB	0.948	0.864	1.039
RaceN	0.745	0.595	0.934
RaceD	1.057	0.934	1.195
RaceU	1.067	0.862	1.320
cEvent_1y	0.989	0.986	0.993
cHosp_1y	1.005	1.001	1.009
tCCI	0.958	0.935	0.981
IncomeM	1.013	0.935	1.097
IncomeH	1.116	1.032	1.207

Association of Predicted Probabilities and Observed Responses			
Percent Concordant	57.4	Somers' D	0.148
Percent Discordant	42.6	Gamma	0.148
Percent Tied	0.0	Tau-a	0.073
Pairs	57761640	c	0.574

The SAS System

The LOGISTIC Procedure

Model Information	
Data Set	WORK.CRCDUMMY
Response Variable	FRFullAdhe
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Number of Observations Read	15944
Number of Observations Used	15302

Response Profile		
Ordered Value	FRFullAdhe	Total Frequency
1	0	8532
2	1	6770

Probability modeled is FRFullAdhe='1'.

Note: 642 observations were deleted due to missing values for the response or explanatory variables.

Class Level Information		
Class	Value	Design Variables
Gender	F	1
	M	0

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

Model Fit Statistics		
Criterion	Intercept Only	Intercept and Covariates
AIC	21011.734	20780.751
SC	21019.370	20979.280

-2 Log L	21009.734	20728.751

Testing Global Null Hypothesis: BETA=0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	280.9834	25	<.0001
Score	278.4607	25	<.0001
Wald	273.3900	25	<.0001

Type 3 Analysis of Effects			
Effect	DF	Wald Chi-Square	Pr > ChiSq
Age5059	1	25.7800	<.0001
Age6064	1	4.0801	0.0434
Gender	1	1.9505	0.1625
RaceAm	1	2.5452	0.1106
RaceA	1	14.7782	0.0001
RaceB	1	0.7576	0.3841
RaceN	1	6.2861	0.0122
RaceD	1	0.9461	0.3307
RaceU	1	0.3901	0.5322
L2	1	3.6065	0.0576
L3	1	2.8414	0.0919
L4	1	8.6529	0.0033
L5	1	2.1785	0.1400
L6	1	1.1232	0.2892
L7	1	8.4667	0.0036
L8	1	5.4118	0.0200
L9	1	0.5622	0.4534
L10	1	8.7587	0.0031
L11	1	0.0888	0.7657
L12	1	1.5778	0.2091
cEvent_1y	1	30.0726	<.0001
cHosp_1y	1	6.2141	0.0127
tCCI	1	12.6937	0.0004
IncomeM	1	0.0610	0.8050
IncomeH	1	0.1471	0.7013

Analysis of Maximum Likelihood Estimates						
Parameter		DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept		1	0.2823	0.0844	11.1864	0.0008
Age5059		1	-0.2078	0.0409	25.7800	<.0001
Age6064		1	-0.0835	0.0414	4.0801	0.0434
Gender	F	1	0.1007	0.0721	1.9505	0.1625
RaceAm		1	-0.2322	0.1455	2.5452	0.1106
RaceA		1	0.4655	0.1211	14.7782	0.0001
RaceB		1	-0.0416	0.0478	0.7576	0.3841
RaceN		1	-0.2897	0.1155	6.2861	0.0122
RaceD		1	0.0611	0.0628	0.9461	0.3307
RaceU		1	0.0680	0.1089	0.3901	0.5322
L2		1	-0.1608	0.0847	3.6065	0.0576
L3		1	-0.4648	0.2757	2.8414	0.0919
L4		1	-0.3916	0.1331	8.6529	0.0033
L5		1	-0.1141	0.0773	2.1785	0.1400
L6		1	-0.3273	0.3088	1.1232	0.2892
L7		1	-0.3197	0.1099	8.4667	0.0036
L8		1	-0.1805	0.0776	5.4118	0.0200
L9		1	-0.0494	0.0658	0.5622	0.4534
L10		1	-0.2817	0.0952	8.7587	0.0031
L11		1	0.0506	0.1698	0.0888	0.7657
L12		1	-0.1073	0.0854	1.5778	0.2091
cEvent_1y		1	-0.0105	0.00191	30.0726	<.0001
cHosp_1y		1	0.00489	0.00196	6.2141	0.0127
tCCI		1	-0.0434	0.0122	12.6937	0.0004
IncomeM		1	0.0107	0.0435	0.0610	0.8050
IncomeH		1	0.0212	0.0553	0.1471	0.7013

Odds Ratio Estimates			
Effect	Point Estimate	95% Wald Confidence Limits	
Age5059	0.812	0.750	0.880
Age6064	0.920	0.848	0.998

Gender F vs M	1.106	0.960	1.274
RaceAm	0.793	0.596	1.054
RaceA	1.593	1.256	2.020
RaceB	0.959	0.873	1.053
RaceN	0.748	0.597	0.939
RaceD	1.063	0.940	1.202
RaceU	1.070	0.865	1.325
L2	0.851	0.721	1.005
L3	0.628	0.366	1.079
L4	0.676	0.521	0.878
L5	0.892	0.767	1.038
L6	0.721	0.394	1.320
L7	0.726	0.586	0.901
L8	0.835	0.717	0.972
L9	0.952	0.837	1.083
L10	0.755	0.626	0.909
L11	1.052	0.754	1.467
L12	0.898	0.760	1.062
cEvent_1y	0.990	0.986	0.993
cHosp_1y	1.005	1.001	1.009
tCCI	0.958	0.935	0.981
IncomeM	1.011	0.928	1.101
IncomeH	1.021	0.916	1.138

Association of Predicted Probabilities and Observed Responses			
Percent Concordant	57.8	**Somers' D**	0.156
Percent Discordant	42.2	**Gamma**	0.156
Percent Tied	0.0	**Tau-a**	0.077
Pairs	57761640	**c**	0.578

The SAS System

The LOGISTIC Procedure

Model Information	
Data Set	WORK.CRCDUMMY
Response Variable	FRFullAdhe
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Number of Observations Read	15944
Number of Observations Used	15302

Response Profile		
Ordered Value	FRFullAdhe	Total Frequency
1	0	8532
2	1	6770

Probability modeled is FRFullAdhe='1'.

Note: 642 observations were deleted due to missing values for the response or explanatory variables.

Class Level Information		
Class	Value	Design Variables
Gender	F	1
	M	0

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

Model Fit Statistics		
Criterion	Intercept Only	Intercept and Covariates
AIC	21011.734	20768.174
SC	21019.370	20959.068

-2 Log L	21009.734	20718.174

Testing Global Null Hypothesis: BETA=0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	291.5599	24	<.0001
Score	288.7689	24	<.0001
Wald	283.3441	24	<.0001

Type 3 Analysis of Effects			
Effect	DF	Wald Chi-Square	Pr > ChiSq
Age5059	1	25.7476	<.0001
Age6064	1	3.9923	0.0457
Gender	1	2.0989	0.1474
RaceAm	1	2.5259	0.1120
RaceA	1	15.3469	<.0001
RaceB	1	0.4401	0.5071
RaceN	1	6.5165	0.0107
RaceD	1	1.0351	0.3090
RaceU	1	0.3082	0.5788
U1	1	1.8006	0.1796
U2	1	0.1294	0.7191
U3	1	0.8515	0.3561
U4	1	2.3593	0.1245
U5	1	0.0145	0.9040
U7	1	0.7639	0.3821
U8	1	0.1884	0.6642
U9	1	2.1620	0.1415
U10	1	0.0446	0.8327
U11	1	0.8851	0.3468
cEvent_1y	1	31.2667	<.0001
cHosp_1y	1	6.6094	0.0101
tCCI	1	11.8123	0.0006
IncomeM	1	0.0944	0.7586
IncomeH	1	1.4956	0.2213

Analysis of Maximum Likelihood Estimates						
Parameter		DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept		1	0.0978	0.1065	0.8429	0.3586
Age5059		1	-0.2073	0.0408	25.7476	<.0001
Age6064		1	-0.0826	0.0413	3.9923	0.0457
Gender	F	1	0.1046	0.0722	2.0989	0.1474
RaceAm		1	-0.2316	0.1457	2.5259	0.1120
RaceA		1	0.4742	0.1210	15.3469	<.0001
RaceB		1	-0.0316	0.0477	0.4401	0.5071
RaceN		1	-0.2948	0.1155	6.5165	0.0107
RaceD		1	0.0640	0.0629	1.0351	0.3090
RaceU		1	0.0605	0.1090	0.3082	0.5788
U1		1	0.1705	0.1271	1.8006	0.1796
U2		1	0.0442	0.1229	0.1294	0.7191
U3		1	-0.1139	0.1235	0.8515	0.3561
U4		1	-0.1710	0.1113	2.3593	0.1245
U5		1	0.0129	0.1072	0.0145	0.9040
U7		1	0.1030	0.1179	0.7639	0.3821
U8		1	0.0504	0.1160	0.1884	0.6642
U9		1	0.1675	0.1139	2.1620	0.1415
U10		1	0.0262	0.1239	0.0446	0.8327
U11		1	0.1358	0.1443	0.8851	0.3468
cEvent_1y		1	-0.0107	0.00191	31.2667	<.0001
cHosp_1y		1	0.00505	0.00196	6.6094	0.0101
tCCI		1	-0.0419	0.0122	11.8123	0.0006
IncomeM		1	0.0142	0.0462	0.0944	0.7586
IncomeH		1	0.0725	0.0593	1.4956	0.2213

Odds Ratio Estimates			
Effect	Point Estimate	95% Wald Confidence Limits	
Age5059	0.813	0.750	0.881
Age6064	0.921	0.849	0.998
Gender F vs M	1.110	0.964	1.279
RaceAm	0.793	0.596	1.056

RaceA	1.607	1.267	2.037
RaceB	0.969	0.882	1.064
RaceN	0.745	0.594	0.934
RaceD	1.066	0.942	1.206
RaceU	1.062	0.858	1.315
U1	1.186	0.924	1.521
U2	1.045	0.821	1.330
U3	0.892	0.701	1.137
U4	0.843	0.678	1.048
U5	1.013	0.821	1.250
U7	1.109	0.880	1.397
U8	1.052	0.838	1.320
U9	1.182	0.946	1.478
U10	1.027	0.805	1.309
U11	1.145	0.863	1.520
cEvent_1y	0.989	0.986	0.993
cHosp_1y	1.005	1.001	1.009
tCCI	0.959	0.936	0.982
IncomeM	1.014	0.927	1.110
IncomeH	1.075	0.957	1.208

Association of Predicted Probabilities and Observed Responses			
Percent Concordant	57.9	**Somers' D**	0.158
Percent Discordant	42.1	**Gamma**	0.158
Percent Tied	0.0	**Tau-a**	0.078
Pairs	57761640	**c**	0.579

The SAS System

The LOGISTIC Procedure

Model Information	
Data Set	WORK.CRCDUMMY
Response Variable	FRFullAdhe
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Number of Observations Read	15944
Number of Observations Used	15302

Response Profile		
Ordered Value	FRFullAdhe	Total Frequency
1	0	8532
2	1	6770

Probability modeled is FRFullAdhe='1'.

Note: 642 observations were deleted due to missing values for the response or explanatory variables.

Class Level Information		
Class	Value	Design Variables
Gender	F	1
	M	0

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

Model Fit Statistics		
Criterion	Intercept Only	Intercept and Covariates
AIC	21011.734	20774.899
SC	21019.370	21049.785

-2 Log L	21009.734	20702.899

Testing Global Null Hypothesis: BETA=0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	306.8356	35	<.0001
Score	303.8139	35	<.0001
Wald	297.8108	35	<.0001

Type 3 Analysis of Effects			
Effect	DF	Wald Chi-Square	Pr > ChiSq
Age5059	1	26.1748	<.0001
Age6064	1	4.0968	0.0430
Gender	1	2.2049	0.1376
RaceAm	1	2.5014	0.1137
RaceA	1	14.2731	0.0002
RaceB	1	0.6746	0.4115
RaceN	1	6.7564	0.0093
RaceD	1	0.9475	0.3304
RaceU	1	0.3035	0.5817
L2	1	1.3403	0.2470
L3	1	1.5093	0.2193
L4	1	2.7259	0.0987
L5	1	3.8693	0.0492
L6	1	0.7391	0.3900
L7	1	3.3106	0.0688
L8	1	4.1179	0.0424
L9	1	0.0275	0.8682
L10	1	9.5267	0.0020
L11	1	0.0054	0.9417
L12	1	1.1736	0.2787
cEvent_1y	1	29.6992	<.0001
cHosp_1y	1	6.0488	0.0139
tCCI	1	12.2050	0.0005
IncomeM	1	0.0904	0.7637
IncomeH	1	0.1964	0.6577

U1	1	0.4851	0.4861
U2	1	0.6185	0.4316
U3	1	1.9451	0.1631
U4	1	0.2896	0.5905
U5	1	0.6157	0.4327
U7	1	0.1975	0.6568
U8	1	0.9106	0.3400
U9	1	2.7216	0.0990
U10	1	0.1180	0.7312
U11	1	0.2861	0.5927

Analysis of Maximum Likelihood Estimates

Parameter		DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept		1	0.2198	0.1300	2.8601	0.0908
Age5059		1	-0.2099	0.0410	26.1748	<.0001
Age6064		1	-0.0838	0.0414	4.0968	0.0430
Gender	F	1	0.1073	0.0722	2.2049	0.1376
RaceAm		1	-0.2305	0.1458	2.5014	0.1137
RaceA		1	0.4588	0.1214	14.2731	0.0002
RaceB		1	-0.0394	0.0480	0.6746	0.4115
RaceN		1	-0.3006	0.1157	6.7564	0.0093
RaceD		1	0.0612	0.0629	0.9475	0.3304
RaceU		1	0.0601	0.1091	0.3035	0.5817
L2		1	-0.1089	0.0940	1.3403	0.2470
L3		1	-0.3479	0.2832	1.5093	0.2193
L4		1	-0.2566	0.1554	2.7259	0.0987
L5		1	-0.1653	0.0840	3.8693	0.0492
L6		1	-0.2721	0.3165	0.7391	0.3900
L7		1	-0.2364	0.1299	3.3106	0.0688
L8		1	-0.1970	0.0971	4.1179	0.0424
L9		1	0.0121	0.0732	0.0275	0.8682
L10		1	-0.3329	0.1078	9.5267	0.0020
L11		1	0.0160	0.2183	0.0054	0.9417
L12		1	-0.1458	0.1346	1.1736	0.2787
cEvent_1y		1	-0.0104	0.00191	29.6992	<.0001

cHosp_1y		1	0.00483	0.00196	6.0488	0.0139
tCCI		1	-0.0426	0.0122	12.2050	0.0005
IncomeM		1	0.0144	0.0481	0.0904	0.7637
IncomeH		1	0.0294	0.0664	0.1964	0.6577
U1		1	0.0946	0.1359	0.4851	0.4861
U2		1	0.1159	0.1474	0.6185	0.4316
U3		1	-0.1811	0.1299	1.9451	0.1631
U4		1	-0.0740	0.1376	0.2896	0.5905
U5		1	0.1063	0.1355	0.6157	0.4327
U7		1	0.0554	0.1247	0.1975	0.6568
U8		1	0.1194	0.1251	0.9106	0.3400
U9		1	0.2075	0.1258	2.7216	0.0990
U10		1	0.0559	0.1626	0.1180	0.7312
U11		1	0.1036	0.1936	0.2861	0.5927

Odds Ratio Estimates			
Effect	Point Estimate	95% Wald Confidence Limits	
Age5059	0.811	0.748	0.879
Age6064	0.920	0.848	0.997
Gender F vs M	1.113	0.966	1.283
RaceAm	0.794	0.597	1.057
RaceA	1.582	1.247	2.007
RaceB	0.961	0.875	1.056
RaceN	0.740	0.590	0.929
RaceD	1.063	0.940	1.203
RaceU	1.062	0.858	1.315
L2	0.897	0.746	1.078
L3	0.706	0.405	1.230
L4	0.774	0.571	1.049
L5	0.848	0.719	0.999
L6	0.762	0.410	1.417
L7	0.789	0.612	1.018
L8	0.821	0.679	0.993
L9	1.012	0.877	1.168
L10	0.717	0.580	0.886

L11	1.016	0.662	1.559
L12	0.864	0.664	1.125
cEvent_1y	0.990	0.986	0.993
cHosp_1y	1.005	1.001	1.009
tCCI	0.958	0.936	0.981
IncomeM	1.015	0.923	1.115
IncomeH	1.030	0.904	1.173
U1	1.099	0.842	1.435
U2	1.123	0.841	1.499
U3	0.834	0.647	1.076
U4	0.929	0.709	1.216
U5	1.112	0.853	1.450
U7	1.057	0.828	1.349
U8	1.127	0.882	1.440
U9	1.231	0.962	1.575
U10	1.057	0.769	1.454
U11	1.109	0.759	1.621

Association of Predicted Probabilities and Observed Responses			
Percent Concordant	58.1	**Somers' D**	0.162
Percent Discordant	41.9	**Gamma**	0.162
Percent Tied	0.0	**Tau-a**	0.080
Pairs	57761640	**c**	0.581