Logi Reg in-hosp mortality vs renalicd9 in MI patients with race + income

The LOGISTIC Procedure

Model Information		
Data Set	LIBRARY.NISMICATHCABG4	
Response Variable	DIED	Died during hospitalization
Number of Response Levels	2	
Weight Variable	DISCWT	Weight to discharges in AHA universe
Model	binary logit	
Optimization Technique	Fisher's scoring	

Number of Observations Read	82173
Number of Observations Used	80475
Sum of Weights Read	413673.1
Sum of Weights Used	405440.5

Response Profile			
Ordered Value	DIED	Total Frequency	Total Weight
1	1: Died in hospital	4344	21924.25
2	0: Did not die in hospital	76131	383516.21

Probability modeled is DIED='1: Died in hospital'.

Note: 1698 observations were deleted due to missing values for the response or explanatory variables.

Class Level Information				
Class	Value	Design Variables		
FEMALE	0: Male	0		
	1: Female	1		
renalicd9	0	0	0	0

Class Level Information					
Class	Value	Design Variables			
	1	1	0	0	
	2	0	1	0	
	3	0	0	1	
DM	0	1			
	1	0			
DMCX	0	1			
	1	0			
HTN_C	0	1			
	1	0			
AIDS	0	1			
	1	0			
ALCOHOL	0	1			
	1	0			
ANEMDEF	0	1			
	1	0			
ARTH	0	1			
	1	0			
race1	1	0	0	0	0
	2	1	0	0	0
	3	0	1	0	0
	4	0	0	1	0
	5	0	0	0	1
ZIPINC_QRTL	1: First quartile	0	0	0	
	2: Second quartile	1	0	0	
	3: Third quartile	0	1	0	
	4: Fourth quartile	0	0	1	
HOSP_LOCATION	0: Rural	1			
	1: Urban	0			

Class Level Information			
Class	**Value**	**Design Variables**	
H_CONTRL	**1**	0	0
	2	1	0
	3	0	1
HOSP_TEACH	**0: Nonteaching**	1	
	1: Teaching	0	
BLDLOSS	**0**	1	
	1	0	
CHF	**0**	1	
	1	0	
CHRNLUNG	**0**	1	
	1	0	
COAG	**0**	1	
	1	0	
DEPRESS	**0**	1	
	1	0	
DRUG	**0**	1	
	1	0	
HYPOTHY	**0**	1	
	1	0	
LIVER	**0**	1	
	1	0	
LYMPH	**0**	1	
	1	0	
LYTES	**0**	1	
	1	0	
METS	**0**	1	
	1	0	
NEURO	**0**	1	

Class Level Information

Class	Value	Design Variables
	1	0
OBESE	0	1
	1	0
PARA	0	1
	1	0
PERIVASC	0	1
	1	0
PSYCH	0	1
	1	0
PULMCIRC	0	1
	1	0
TUMOR	0	1
	1	0
ULCER	0	1
	1	0
VALVE	0	1
	1	0
WGHTLOSS	0	1
	1	0
cararrhythmia	0	1
	1	0

Model Convergence Status

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

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	170565.75	150354.20
SC	170575.05	150791.09
-2 Log L	170563.75	150260.20

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	20303.5568	46	<.0001
Score	23570.3792	46	<.0001
Wald	19275.5260	46	<.0001

Type 3 Analysis of Effects

Effect	DF	Wald Chi-Square	Pr > ChiSq
AGE	1	4384.8498	<.0001
FEMALE	1	1.0506	0.3054
DM	1	42.9389	<.0001
DMCX	1	8.9283	0.0028
HTN_C	1	1029.2513	<.0001
AIDS	1	7.8113	0.0052
ALCOHOL	1	26.7650	<.0001
ANEMDEF	1	325.5300	<.0001
ARTH	1	1.2798	0.2579
race1	4	30.1157	<.0001
ZIPINC_QRTL	3	3.8373	0.2796
HOSP_LOCATION	1	64.2303	<.0001
H_CONTRL	2	38.0941	<.0001
HOSP_TEACH	1	33.6856	<.0001

Type 3 Analysis of Effects

Effect	DF	Wald Chi-Square	Pr > ChiSq
TOTAL_DISC	1	5.8408	0.0157
BLDLOSS	1	79.9007	<.0001
CHF	1	135.3934	<.0001
CHRNLUNG	1	4.5495	0.0329
COAG	1	799.9834	<.0001
DEPRESS	1	126.0486	<.0001
DRUG	1	0.3739	0.5409
HYPOTHY	1	25.5025	<.0001
LIVER	1	59.0447	<.0001
LYMPH	1	1.1374	0.2862
LYTES	1	5865.2091	<.0001
METS	1	275.5635	<.0001
NEURO	1	500.7023	<.0001
OBESE	1	106.0273	<.0001
PARA	1	84.9141	<.0001
PERIVASC	1	125.5107	<.0001
PSYCH	1	22.5199	<.0001
PULMCIRC	1	0.1503	0.6982
renalicd9	3	1037.2016	<.0001
TUMOR	1	87.6454	<.0001
ULCER	1	0.0537	0.8167
VALVE	1	7.4969	0.0062
WGHTLOSS	1	79.2575	<.0001
cararrhythmia	1	47.7971	<.0001

Analysis of Maximum Likelihood Estimates

Parameter		DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept		1	-12.0236	42.7588	0.0791	0.7786
AGE		1	0.0424	0.000640	4384.8498	<.0001
FEMALE	1: Female	1	-0.0157	0.0153	1.0506	0.3054
DM	0	1	-0.1091	0.0166	42.9389	<.0001
DMCX	0	1	-0.0894	0.0299	8.9283	0.0028
HTN_C	0	1	0.4913	0.0153	1029.2513	<.0001
AIDS	0	1	-0.4871	0.1743	7.8113	0.0052
ALCOHOL	0	1	-0.2261	0.0437	26.7650	<.0001
ANEMDEF	0	1	0.3439	0.0191	325.5300	<.0001
ARTH	0	1	0.0583	0.0516	1.2798	0.2579
race1	2	1	-0.00781	0.0274	0.0812	0.7756
race1	3	1	-0.00077	0.0288	0.0007	0.9787
race1	4	1	0.2366	0.0435	29.5151	<.0001
race1	5	1	0.0120	0.0354	0.1144	0.7352
ZIPINC_QRTL	2: Second quartile	1	-0.00884	0.0201	0.1934	0.6601
ZIPINC_QRTL	3: Third quartile	1	0.00219	0.0207	0.0112	0.9158
ZIPINC_QRTL	4: Fourth quartile	1	-0.0357	0.0218	2.6779	0.1018
HOSP_LOCATION	0: Rural	1	0.2313	0.0289	64.2303	<.0001
H_CONTRL	2	1	-0.0906	0.0257	12.4761	0.0004
H_CONTRL	3	1	0.0259	0.0304	0.7215	0.3956
HOSP_TEACH	0: Nonteaching	1	-0.0963	0.0166	33.6856	<.0001
TOTAL_DISC		1	-1.2E-6	4.953E-7	5.8408	0.0157
BLDLOSS	0	1	0.5810	0.0650	79.9007	<.0001
CHF	0	1	-0.5851	0.0503	135.3934	<.0001
CHRNLUNG	0	1	-0.0371	0.0174	4.5495	0.0329

Analysis of Maximum Likelihood Estimates

Parameter		DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
COAG	0	1	-0.6794	0.0240	799.9834	<.0001
DEPRESS	0	1	0.3884	0.0346	126.0486	<.0001
DRUG	0	1	-0.0417	0.0682	0.3739	0.5409
HYPOTHY	0	1	0.1224	0.0242	25.5025	<.0001
LIVER	0	1	-0.4202	0.0547	59.0447	<.0001
LYMPH	0	1	0.0993	0.0931	1.1374	0.2862
LYTES	0	1	-1.1723	0.0153	5865.2091	<.0001
METS	0	1	-0.8775	0.0529	275.5635	<.0001
NEURO	0	1	-0.5478	0.0245	500.7023	<.0001
OBESE	0	1	0.2834	0.0275	106.0273	<.0001
PARA	0	1	-0.4018	0.0436	84.9141	<.0001
PERIVASC	0	1	-0.2210	0.0197	125.5107	<.0001
PSYCH	0	1	0.2656	0.0560	22.5199	<.0001
PULMCIRC	0	1	0.0506	0.1305	0.1503	0.6982
renalicd9	1	1	-0.2008	0.0374	28.8243	<.0001
renalicd9	2	1	0.2029	0.0467	18.8598	<.0001
renalicd9	3	1	0.8465	0.0274	952.9091	<.0001
TUMOR	0	1	-0.4415	0.0472	87.6454	<.0001
ULCER	0	1	9.9092	42.7578	0.0537	0.8167
VALVE	0	1	0.2892	0.1056	7.4969	0.0062
WGHTLOSS	0	1	-0.2894	0.0325	79.2575	<.0001
cararrhythmia	0	1	-0.1172	0.0170	47.7971	<.0001

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits	

Odds Ratio Estimates		
Effect	**Point Estimate**	**95% Wald Confidence Limits**
AGE	1.043	1.042 1.045
FEMALE 1: Female vs 0: Male	0.984	0.955 1.014
DM 0 vs 1	0.897	0.868 0.926
DMCX 0 vs 1	0.915	0.862 0.970
HTN_C 0 vs 1	1.634	1.586 1.684
AIDS 0 vs 1	0.614	0.437 0.865
ALCOHOL 0 vs 1	0.798	0.732 0.869
ANEMDEF 0 vs 1	1.410	1.359 1.464
ARTH 0 vs 1	1.060	0.958 1.173
race1 2 vs 1	0.992	0.940 1.047
race1 3 vs 1	0.999	0.944 1.057
race1 4 vs 1	1.267	1.163 1.380
race1 5 vs 1	1.012	0.944 1.085
ZIPINC_QRTL 2: Second quartile vs 1: First quartile	0.991	0.953 1.031
ZIPINC_QRTL 3: Third quartile vs 1: First quartile	1.002	0.962 1.044
ZIPINC_QRTL 4: Fourth quartile vs 1: First quartile	0.965	0.925 1.007
HOSP_LOCATION 0: Rural vs 1: Urban	1.260	1.191 1.334
H_CONTRL 2 vs 1	0.913	0.869 0.960
H_CONTRL 3 vs 1	1.026	0.967 1.089
HOSP_TEACH 0: Nonteaching vs 1: Teaching	0.908	0.879 0.938
TOTAL_DISC	1.000	1.000 1.000
BLDLOSS 0 vs 1	1.788	1.574 2.031
CHF 0 vs 1	0.557	0.505 0.615
CHRNLUNG 0 vs 1	0.964	0.931 0.997

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits	
COAG 0 vs 1	0.507	0.484	0.531
DEPRESS 0 vs 1	1.475	1.378	1.578
DRUG 0 vs 1	0.959	0.839	1.096
HYPOTHY 0 vs 1	1.130	1.078	1.185
LIVER 0 vs 1	0.657	0.590	0.731
LYMPH 0 vs 1	1.104	0.920	1.325
LYTES 0 vs 1	0.310	0.301	0.319
METS 0 vs 1	0.416	0.375	0.461
NEURO 0 vs 1	0.578	0.551	0.607
OBESE 0 vs 1	1.328	1.258	1.401
PARA 0 vs 1	0.669	0.614	0.729
PERIVASC 0 vs 1	0.802	0.771	0.833
PSYCH 0 vs 1	1.304	1.169	1.455
PULMCIRC 0 vs 1	1.052	0.814	1.359
renalicd9 1 vs 0	0.818	0.760	0.880
renalicd9 2 vs 0	1.225	1.118	1.343
renalicd9 3 vs 0	2.332	2.210	2.460
TUMOR 0 vs 1	0.643	0.586	0.705
ULCER 0 vs 1	>999.999	<0.001	>999.999
VALVE 0 vs 1	1.335	1.086	1.643
WGHTLOSS 0 vs 1	0.749	0.702	0.798
cararrhythmia 0 vs 1	0.889	0.860	0.919

Association of Predicted Probabilities and Observed Responses

Percent Concordant	77.0	Somers' D	0.551
Percent Discordant	21.9	Gamma	0.557
Percent Tied	1.1	Tau-a	0.056

Association of Predicted Probabilities and Observed Responses			
Pairs	330713064	c	0.775