

The LOGISTIC Procedure

Model Information	
Data Set	EXAM.DA2835P1_G
Response Variable	Low_Birth_Wt
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Number of Observations Read	2613
Number of Observations Used	2612

Response Profile		
Ordered Value	Low_Birth_Wt	Total Frequency
1	No	2352
2	Yes	260

Probability modeled is Low_Birth_Wt='No'.

Note: 1 observation was deleted due to missing values for the response or explanatory variables.

Class Level Information				
Class	Value	Design Variables		
I_RACETH	(1) WHITE	1	0	0
	(2) BLACK	0	1	0
	(3) HISPANIC	0	0	1
	(4) OTHER	0	0	0
Age_cat	15-2	1	0	
	25/2	0	0	
	<=14	0	1	
EDUC	(1) < 12 YEARS	1	0	0
	(2) 12 YEARS	0	1	0
	(3) 13 - 15 YEARS	0	0	1
	(4) 16 + YEARS	0	0	0
MARITAL1	(1) MARRIED	1		
	(2) NOT MARRIED	0		
IAQ_7	(1) YES	1		
	(2) NO	0		
ALLPREG	(1) YES	1		
	(2) NO	0		

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

Model Fit Statistics		
Criterion	Intercept Only	Intercept and Covariates
AIC	1694.954	1628.985
SC	1700.822	1699.399
-2 Log L	1692.954	1604.985

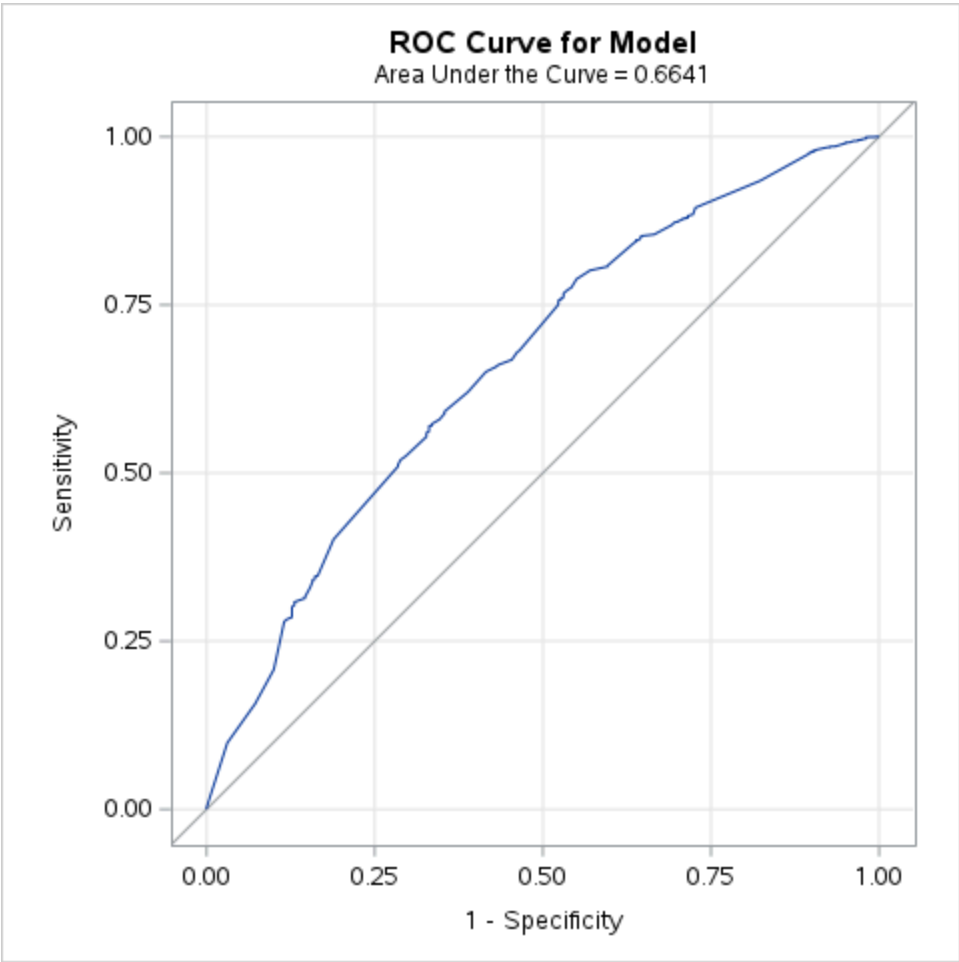
R-Square	0.0331	Max-rescaled R-Square	0.0694
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Testing Global Null Hypothesis: BETA=0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	87.9693	11	<.0001
Score	101.4985	11	<.0001
Wald	88.2597	11	<.0001

Type 3 Analysis of Effects			
Effect	DF	Wald Chi-Square	Pr > ChiSq
I_RACETH	3	17.9905	0.0004
Age_cat	2	0.4098	0.8147
EDUC	3	9.8401	0.0200
MARITAL1	1	2.7882	0.0950
IAQ_7	1	12.5559	0.0004
ALLPREG	1	2.1817	0.1397

Analysis of Maximum Likelihood Estimates								
Parameter		DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq	Standardized Estimate	Exp(Est)
Intercept		1	1.5455	0.5583	7.6625	0.0056		4.690
I_RACETH	(1) WHITE	1	0.1358	0.4110	0.1091	0.7411	0.0369	1.145
I_RACETH	(2) BLACK	1	-0.6094	0.4190	2.1154	0.1458	-0.1324	0.544
I_RACETH	(3) HISPANIC	1	-0.1357	0.4256	0.1017	0.7498	-0.0293	0.873
Age_cat	15-2	1	-0.0318	0.1603	0.0394	0.8426	-0.00826	0.969
Age_cat	<=14	1	0.2749	0.5119	0.2885	0.5912	0.0195	1.316
EDUC	(1) < 12 YEARS	1	-0.6071	0.2647	5.2611	0.0218	-0.1460	0.545
EDUC	(2) 12 YEARS	1	-0.5284	0.2434	4.7139	0.0299	-0.1401	0.590
EDUC	(3) 13 - 15 YEARS	1	-0.0600	0.2779	0.0466	0.8292	-0.0132	0.942
MARITAL1	(1) MARRIED	1	0.2706	0.1621	2.7882	0.0950	0.0711	1.311
IAQ_7	(1) YES	1	1.0973	0.3097	12.5559	0.0004	0.0861	2.996
ALLPREG	(1) YES	1	-0.3556	0.2407	2.1817	0.1397	-0.0450	0.701

Odds Ratio Estimates			
Effect	Point Estimate	95% Wald Confidence Limits	
I_RACETH (1) WHITE vs (4) OTHER	1.145	0.512	2.563
I_RACETH (2) BLACK vs (4) OTHER	0.544	0.239	1.236
I_RACETH (3) HISPANIC vs (4) OTHER	0.873	0.379	2.011
Age_cat 15-2 vs 25/2	0.969	0.707	1.326
Age_cat <=14 vs 25/2	1.316	0.483	3.590
EDUC (1) < 12 YEARS vs (4) 16 + YEARS	0.545	0.324	0.915
EDUC (2) 12 YEARS vs (4) 16 + YEARS	0.590	0.366	0.950
EDUC (3) 13 - 15 YEARS vs (4) 16 + YEARS	0.942	0.546	1.624
MARITAL1 (1) MARRIED vs (2) NOT MARRIED	1.311	0.954	1.801
IAQ_7 (1) YES vs (2) NO	2.996	1.633	5.497
ALLPREG (1) YES vs (2) NO	0.701	0.437	1.123



Partition for the Hosmer and Lemeshow Test					
Group	Total	Low_Birth_Wt = No		Low_Birth_Wt = Yes	
		Observed	Expected	Observed	Expected
1	319	248	248.08	71	70.92
2	261	220	222.75	41	38.25
3	306	279	271.78	27	34.22
4	273	242	245.99	31	27.01
5	180	164	164.70	16	15.30
6	281	256	259.46	25	21.54
7	256	240	238.22	16	17.78
8	221	214	209.79	7	11.21
9	275	257	262.01	18	12.99
10	240	232	229.20	8	10.80

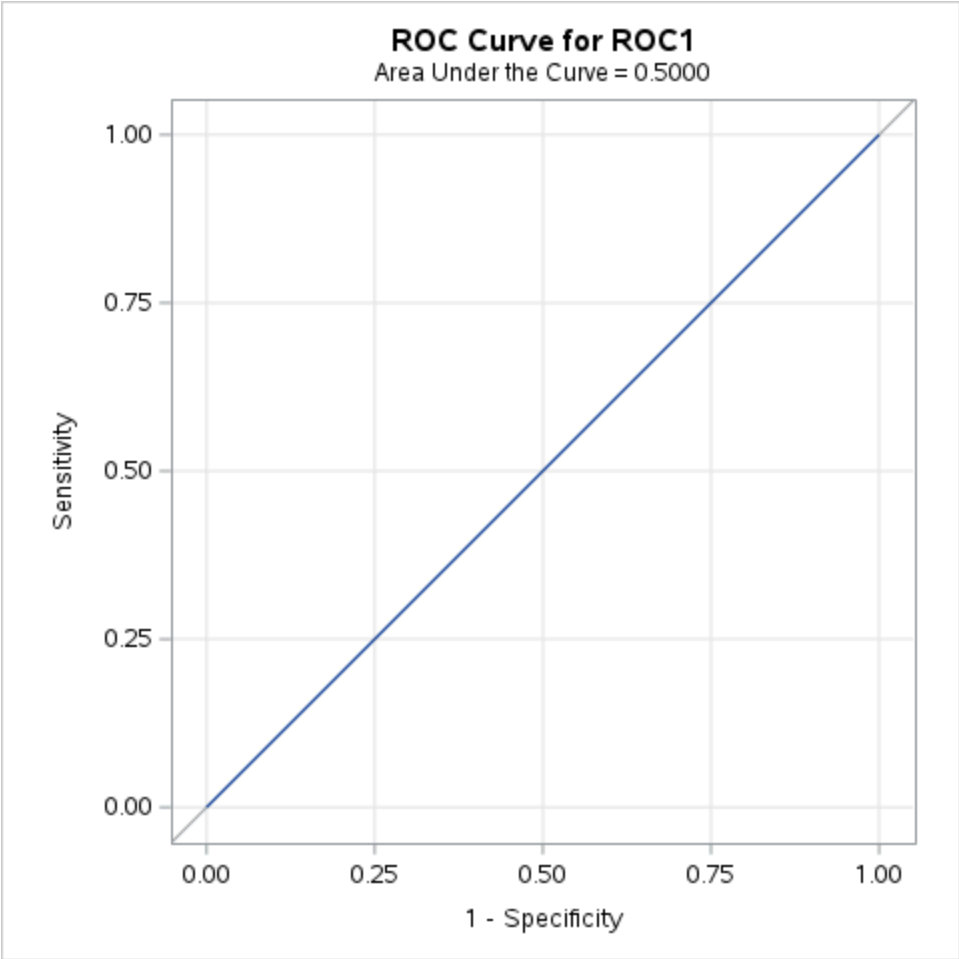
Hosmer and Lemeshow Goodness-of-Fit Test		
Chi-Square	DF	Pr > ChiSq
7.8899	8	0.4443

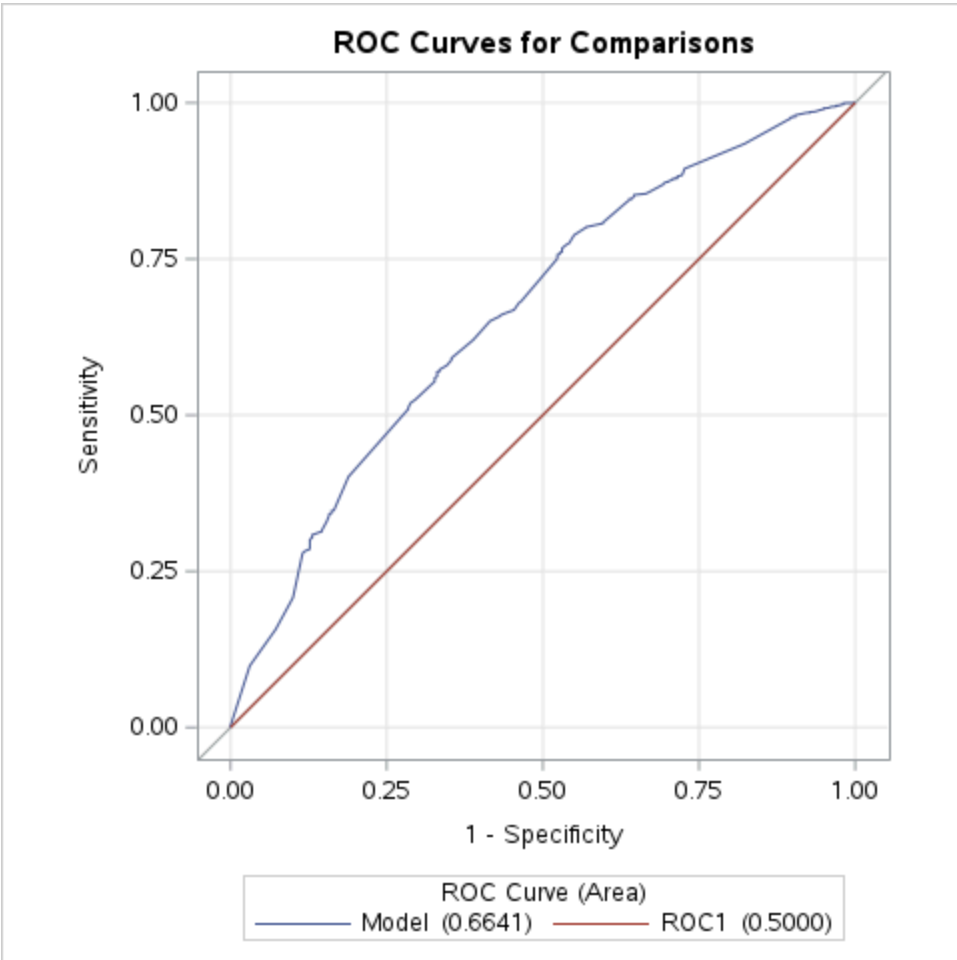
ROC Model: ROC1

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

-2 Log L	=	1692.954
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Analysis of Maximum Likelihood Estimates							
Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq	Standardized Estimate	Exp(Est)
Intercept	1	2.2023	0.0654	1135.5496	<.0001		9.046





ROC Association Statistics							
ROC Model	Mann-Whitney				Somers' D	Gamma	Tau-a
	Area	Standard Error	95% Wald Confidence Limits				
Model	0.6641	0.0179	0.6290	0.6992	0.3282	0.3396	0.0588
ROC1	0.5000	0	0.5000	0.5000	0	.	0

AUROC

Area under the Curve
0.6641