The SURVEYLOGISTIC Procedure

Model Information						
Data Set	CHIS.CHIS_DATA_FINAL					
Response Variable	asthmastatus	asthmatic status				
Number of Response Levels	3					
Weight Variable	fnwgt0					
Model	Generalized Logit					
Optimization Technique	Newton-Raphson					

Number of Observations Read	124521
Number of Observations Used	124521
Sum of Weights Read	28246634
Sum of Weights Used	28246634

Response Profile								
Ordered Value	asthmastatus	Total Frequency	Total Weight					
1	1 Current Asthmatic	13590	2765889					
2	2 Previous Asthmatic	4811	1262024					
3	3 Non-Asthmatic	106120	24218720					

Logits modeled use asthmastatus='1 Current Asthmatic' as the reference category.

	Class Level Information									
Class	Value	Design Variables								
SRSEX	Female	1								
	Male	-1								
agegroup	Later Adult (65+)	1	0							
	Middle Aged (40-64)	0	1							
	Young Adult (18-39)	-1	-1							
CITIZEN2	Naturalized Citizen	1	0							
	Non-Citizen	0	1							
	US-Born Citizen	-1	-1							
famtype	Married w/ Children	-1	-1	-1						
	Married w/o Children	1	0	0						
	Single w/ Children	0	1	0						
	Single w/o Children	0	0	1						
UR_CLRT	2nd City	1	0	0						
	Suburban	0	1	0						
	Town & Rural	-1	-1	-1						
	Urban	0	0	1						
RBMI	Normal 18.5-24.99	-1	-1	-1						

Class Level Information										
Class	Value			Des	sign	Vai	riabl	es		
	Obese 30.0+	1	0	0						
	Overweight 25.0-29.99	0	1	0						
	Underweight 0-18.49	0	0	1						
SMOKING	Currently Smokes	1	0							
	Never Smoked Regularly	-1	-1							
	Quit Smoking	0	1							
DSTRS12	No	-1								
	Yes	1								
POVLL	0-99% FPL	1	0	0						
	100-199% FPL	0	1	0						
	200-299% FPL	0	0	1						
	300% FPL and Above	-1	-1	-1						
FSLEV	Food Insecurity w/ Hunger	1	0	0						
	Food Insecurity w/o Hunger	0	1	0						
	Food Security	0	0	1						
	Inapplicable / >=200% FPL	-1	-1	-1						
AK4	Family Business or Farm	1	0	0	0					
	Government	-1	-1	-1	-1					
	Inapplicable	0	1	0	0					
	Private Company, Non-Profit Org	0	0	1	0					
	Self-Employed	0	0	0	1					
healthplan	Aetna	1	0	0	0	0	0	0	0	0
	Blue Cross	0	1	0	0	0	0	0	0	0
	Blue Shield	0	0	1	0	0	0	0	0	0
	Cigna Health Care	0	0	0	1	0	0	0	0	0
	Health Net	0	0	0	0	1	0	0	0	0
	Inapplicable	-1	-1	-1	-1	-1	-1	-1	-1	-1
	Kaiser	0	0	0	0	0	1	0	0	0
	Medicare/Medi-Cal	0	0	0	0	0	0	1	0	0
	Other	0	0	0	0	0	0	0	1	0
	United Healthcare	0	0	0	0	0	0	0	0	1

Variance Estimation						
Method Jackknife						
Replicate Weights	CHIS_DATA_FINAL					
Number of Replicates	160					

The SURVEYLOGISTIC Procedure

Model Convergence Status

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

Model Fit Statistics								
Criterion	Intercept Only	Intercept and Covariates						
AIC	28151126	26794337						
SC	28151156	26795428						
-2 Log L	28151122	26794193						

Testing Global Null Hypothesis: BETA=0									
Test	t F Value Num DF Den DF Pr								
Likelihood Ratio	70.58	42.3274	6772.38	<.0001					
Score	36.50	70	160	<.0001					
Wald	44.06	70	160	<.0001					
NOTE: Second-order Rao-Scott design correction 0.6538 applied to the Likelihood Ratio test.									

Т	ype 3 Ana	alysis of E	ffects	
Effect	F Value	Num DF	Den DF	Pr > F
SRSEX	58.60	2	160	<.0001
agegroup	19.18	4	160	<.0001
CITIZEN2	59.39	4	160	<.0001
famtype	3.89	6	160	0.0012
UR_CLRT	1.60	6	160	0.1491
RBMI	25.47	6	160	<.0001
SMOKING	3.39	4	160	0.0109
DSTRS12	37.62	2	160	<.0001
POVLL	6.24	6	160	<.0001
FSLEV	8.89	4	160	<.0001
AK4	5.33	8	160	<.0001
healthplan	4.42	18	160	<.0001

 $oldsymbol{\mathit{Note:}}$ The following parameters have been set to 0, since the variables are a linear combination of other variables as shown.

Security_2 Previous	-Intercept_2 Previous Asthmatic + 2 * POVLL0-99% FPL_2 Previous Asthma + 2 * POVLL100-199% FPL_2 Previous Ast - 2 * POVLL200-299% FPL_2 Previous Ast - FSLEVFood Insecurity w/ Hunger_2 - FSLEVFood Insecurity w/o Hunger_
Security_3	-Intercept_3 Non-Asthmatic + 2 * POVLL0-99% FPL_3 Non-Asthmatic + 2 * POVLL100-199% FPL_3 Non-Asthmati - 2 * POVLL200-299% FPL_3 Non-Asthmati - FSLEVFood Insecurity w/ Hunger_3 - FSLEVFood Insecurity w/o Hunger_

Analysis of Maximum Likelihood Estimates									
				Standard					
Parameter		asthmastatus	Estimate	Error	t Value				
Intercept		2 Previous Asthmatic	-1.3267	0.1710	-7.76	<.0001			
Intercept		3 Non-Asthmatic	2.0788	0.0963	21.58	<.0001			
SRSEX	Female	2 Previous Asthmatic	-0.3621	0.0374	-9.67	<.0001			
SRSEX	Female	3 Non-Asthmatic	-0.2378	0.0251	-9.49	<.0001			
agegroup	Later Adult (65+)	2 Previous Asthmatic	-0.0622	0.0825	-0.75	0.4521			
agegroup	Later Adult (65+)	3 Non-Asthmatic	0.2522	0.0440	5.74	<.0001			
agegroup	Middle Aged (40-64)	2 Previous Asthmatic	-0.1988	0.0618	-3.22	0.0016			
agegroup	Middle Aged (40-64)	3 Non-Asthmatic	-0.0754	0.0316	-2.39	0.0182			
CITIZEN2	Naturalized Citizen	2 Previous Asthmatic	0.1585	0.0865	1.83	0.0686			
CITIZEN2	Naturalized Citizen	3 Non-Asthmatic	0.0973	0.0515	1.89	0.0605			
CITIZEN2	Non-Citizen	2 Previous Asthmatic	-0.1223	0.1190	-1.03	0.3054			
CITIZEN2	Non-Citizen	3 Non-Asthmatic	0.4461	0.0601	7.42	<.0001			
famtype	Married w/o Children	2 Previous Asthmatic	-0.0154	0.0682	-0.23	0.8216			
famtype	Married w/o Children	3 Non-Asthmatic	-0.0641	0.0368	-1.74	0.0837			
famtype	Single w/ Children	2 Previous Asthmatic	-0.1267	0.1211	-1.05	0.2968			
famtype	Single w/ Children	3 Non-Asthmatic	0.0205	0.0588	0.35	0.7274			
famtype	Single w/o Children	2 Previous Asthmatic	-0.0377	0.0574	-0.66	0.5116			
famtype	Single w/o Children	3 Non-Asthmatic	-0.1108	0.0305	-3.63	0.0004			
UR_CLRT	2nd City	2 Previous Asthmatic	-0.0898	0.0719	-1.25	0.2134			
UR_CLRT	2nd City	3 Non-Asthmatic	-0.0796	0.0323	-2.46	0.0148			
UR_CLRT	Suburban	2 Previous Asthmatic	0.1169	0.0709	1.65	0.1011			
UR_CLRT	Suburban	3 Non-Asthmatic	0.0479	0.0377	1.27	0.2057			
UR_CLRT	Urban	2 Previous Asthmatic	0.0208	0.0553	0.38	0.7074			
UR_CLRT	Urban	3 Non-Asthmatic	0.0505	0.0306	1.65	0.1013			
RBMI	Obese 30.0+	2 Previous Asthmatic	-0.1794	0.1017	-1.76	0.0797			
RBMI	Obese 30.0+	3 Non-Asthmatic	-0.3632	0.0450	-8.07	<.0001			
RBMI	Overweight 25.0-29.99	2 Previous Asthmatic	0.0955	0.0911	1.05	0.2961			
RBMI	Overweight 25.0-29.99	3 Non-Asthmatic	0.0277	0.0462	0.60	0.5495			
RBMI	Underweight 0-18.49	2 Previous Asthmatic	-0.1837	0.2313	-0.79	0.4283			
RBMI	Underweight 0-18.49	3 Non-Asthmatic	0.1323	0.1057	1.25	0.2126			
SMOKING	Currently Smokes	2 Previous Asthmatic	-0.0166	0.0705	-0.24	0.8145			
SMOKING	Currently Smokes	3 Non-Asthmatic	-0.0183	0.0407	-0.45	0.6526			
SMOKING	Quit Smoking	2 Previous Asthmatic	-0.0996	0.0558	-1.79	0.0761			
SMOKING	Quit Smoking	3 Non-Asthmatic	-0.0727	0.0340	-2.14	0.0339			
DSTRS12	Yes	2 Previous Asthmatic	-0.1488	0.0663	-2.24	0.0262			
DSTRS12	Yes	3 Non-Asthmatic	-0.2844	0.0332	-8.57	<.0001			
POVLL	0-99% FPL	2 Previous Asthmatic	0.3162	0.1865	1.70	0.0920			
	NOTE: The degrees	of freedom for the t tests	s is 160.						

	Analysis of Ma	ximum Likelihood Estim	ates			
				Standard		
Parameter		asthmastatus	Estimate	Error	t Value	
POVLL	0-99% FPL	3 Non-Asthmatic	0.4253	0.0914	4.65	<.0001
POVLL	100-199% FPL	2 Previous Asthmatic	0.3690	0.1615	2.28	0.0237
POVLL	100-199% FPL	3 Non-Asthmatic	0.5132	0.0897	5.72	<.0001
POVLL	200-299% FPL	2 Previous Asthmatic	-0.3246	0.1678	-1.93	0.0549
POVLL	200-299% FPL	3 Non-Asthmatic	-0.5183	0.0899	-5.77	<.0001
FSLEV	Food Insecurity w/ Hunger	2 Previous Asthmatic	-0.5485	0.2013	-2.72	0.0072
FSLEV	Food Insecurity w/ Hunger	3 Non-Asthmatic	-0.5316	0.1034	-5.14	<.0001
FSLEV	Food Insecurity w/o Hunger	2 Previous Asthmatic	-0.2383	0.1384	-1.72	0.0871
FSLEV	Food Insecurity w/o Hunger	3 Non-Asthmatic	-0.2666	0.0645	-4.13	<.0001
FSLEV	Food Security	2 Previous Asthmatic	0			
FSLEV	Food Security	3 Non-Asthmatic	0			
AK4	Family Business or Farm	2 Previous Asthmatic	0.0314	0.2687	0.12	0.9071
AK4	Family Business or Farm	3 Non-Asthmatic	-0.0611	0.1567	-0.39	0.6974
AK4	Inapplicable	2 Previous Asthmatic	-0.2344	0.0842	-2.78	0.0061
AK4	Inapplicable	3 Non-Asthmatic	-0.0912	0.0490	-1.86	0.0645
AK4	Private Company, Non-Profit Org	2 Previous Asthmatic	0.0734	0.0942	0.78	0.4371
AK4	Private Company, Non-Profit Org	3 Non-Asthmatic	0.1162	0.0547	2.12	0.0353
AK4	Self-Employed	2 Previous Asthmatic	0.2234	0.1140	1.96	0.0517
AK4	Self-Employed	3 Non-Asthmatic	0.1526	0.0726	2.10	0.0372
healthplan	Aetna	2 Previous Asthmatic	0.2527	0.1702	1.48	0.1396
healthplan	Aetna	3 Non-Asthmatic	0.2465	0.1026	2.40	0.0174
healthplan	Blue Cross	2 Previous Asthmatic	0.1096	0.0997	1.10	0.2729
healthplan	Blue Cross	3 Non-Asthmatic	0.0901	0.0611	1.47	0.1423
healthplan	Blue Shield	2 Previous Asthmatic	-0.0638	0.1371	-0.47	0.6424
healthplan	Blue Shield	3 Non-Asthmatic	-0.0662	0.0838	-0.79	0.4308
healthplan	Cigna Health Care	2 Previous Asthmatic	-0.4260	0.2744	-1.55	0.1225
healthplan	Cigna Health Care	3 Non-Asthmatic	-0.1631	0.1524	-1.07	0.2864
healthplan	Health Net	2 Previous Asthmatic	-0.0977	0.2045	-0.48	0.6336
healthplan	Health Net	3 Non-Asthmatic	-0.0599	0.1319	-0.45	0.6507
healthplan	Kaiser	2 Previous Asthmatic	0.00273	0.0960	0.03	0.9773
healthplan	Kaiser	3 Non-Asthmatic	-0.1407	0.0526	-2.68	0.0082
healthplan	Medicare/Medi-Cal	2 Previous Asthmatic	-0.1499	0.1012	-1.48	0.1407
healthplan	Medicare/Medi-Cal	3 Non-Asthmatic	-0.2205	0.0651	-3.39	0.0009
healthplan	Other	2 Previous Asthmatic	0.1841	0.1646	1.12	0.2649
healthplan	Other	3 Non-Asthmatic	0.0945	0.0923	1.02	0.3071
healthplan	United Healthcare	2 Previous Asthmatic	0.0532	0.1522	0.35	0.7271
healthplan	United Healthcare	3 Non-Asthmatic	-0.0700	0.1112	-0.63	0.5301
	NOTE: The degrees	of freedom for the t tests	s is 160.			

Odds Ratio Estimates						
Effect	asthmastatus	Point Estimate	95% Confidence Limits			
SRSEX Female vs Male	2 Previous Asthmatic	0.485	0.418	0.562		
SRSEX Female vs Male	3 Non-Asthmatic	0.622	0.563	0.686		
agegroup Later Adult (65+) vs Young Adult (18-39)	2 Previous Asthmatic	0.724	0.561	0.933		
agegroup Later Adult (65+) vs Young Adult (18-39)	3 Non-Asthmatic	1.536	1.323	1.782		
agegroup Middle Aged (40-64) vs Young Adult (18-39)	2 Previous Asthmatic	0.631	0.531	0.750		
agegroup Middle Aged (40-64) vs Young Adult (18-39)	3 Non-Asthmatic	1.107	0.995	1.231		
CITIZEN2 Naturalized Citizen vs US-Born Citizen	2 Previous Asthmatic	1.215	0.973	1.517		
CITIZEN2 Naturalized Citizen vs US-Born Citizen	3 Non-Asthmatic	1.898	1.650	2.182		
CITIZEN2 Non-Citizen vs US-Born Citizen	2 Previous Asthmatic	0.917	0.642	1.311		
CITIZEN2 Non-Citizen vs US-Born Citizen	3 Non-Asthmatic	2.690	2.257	3.205		
famtype Married w/o Children vs Married w/ Children	2 Previous Asthmatic	0.823	0.648	1.044		
famtype Married w/o Children vs Married w/ Children	3 Non-Asthmatic	0.804	0.701	0.922		
famtype Single w/ Children vs Married w/ Children	2 Previous Asthmatic	0.736	0.506	1.070		
famtype Single w/ Children vs Married w/ Children	3 Non-Asthmatic	0.875	0.727	1.053		
famtype Single w/o Children vs Married w/ Children	2 Previous Asthmatic	0.804	0.652	0.993		
famtype Single w/o Children vs Married w/ Children	3 Non-Asthmatic	0.767	0.679	0.866		
UR_CLRT 2nd City vs Town & Rural	2 Previous Asthmatic	0.959	0.765	1.202		
UR_CLRT 2nd City vs Town & Rural	3 Non-Asthmatic	0.941	0.835	1.061		
UR_CLRT Suburban vs Town & Rural	2 Previous Asthmatic	1.179	0.942	1.477		
UR_CLRT Suburban vs Town & Rural	3 Non-Asthmatic	1.069	0.934	1.224		
UR_CLRT Urban vs Town & Rural	2 Previous Asthmatic	1.071	0.876	1.310		
UR_CLRT Urban vs Town & Rural	3 Non-Asthmatic	1.072	0.951	1.208		
RBMI Obese 30.0+ vs Normal 18.5-24.99	2 Previous Asthmatic	0.640	0.527	0.775		
RBMI Obese 30.0+ vs Normal 18.5-24.99	3 Non-Asthmatic	0.568	0.515	0.626		
RBMI Overweight 25.0-29.99 vs Normal 18.5-24.99	2 Previous Asthmatic	0.842	0.707	1.002		
RBMI Overweight 25.0-29.99 vs Normal 18.5-24.99	3 Non-Asthmatic	0.839	0.765	0.921		
RBMI Underweight 0-18.49 vs Normal 18.5-24.99	2 Previous Asthmatic	0.637	0.344	1.177		
RBMI Underweight 0-18.49 vs Normal 18.5-24.99	3 Non-Asthmatic	0.932	0.701	1.238		
SMOKING Currently Smokes vs Never Smoked Regularly	2 Previous Asthmatic	0.876	0.708	1.084		
SMOKING Currently Smokes vs Never Smoked Regularly	3 Non-Asthmatic	0.896	0.792	1.014		
SMOKING Quit Smoking vs Never Smoked Regularly	2 Previous Asthmatic	0.806	0.691	0.940		
SMOKING Quit Smoking vs Never Smoked Regularly	3 Non-Asthmatic	0.849	0.770	0.935		
DSTRS12 Yes vs No	2 Previous Asthmatic	0.743	0.571	0.965		
DSTRS12 Yes vs No	3 Non-Asthmatic	0.566	0.497	0.645		
POVLL 0-99% FPL vs 300% FPL and Above	2 Previous Asthmatic	1.968	0.995	3.893		
POVLL 0-99% FPL vs 300% FPL and Above	3 Non-Asthmatic	2.329	1.662	3.264		
NOTE: The degrees of freedom in computing the confidence limits is 160.						

Odds Ratio Estimates							
Effect	asthmastatus	Point Estimate	95% Confidence Limits				
POVLL 100-199% FPL vs 300% FPL and Above	2 Previous Asthmatic	2.074	1.104	3.896			
POVLL 100-199% FPL vs 300% FPL and Above	3 Non-Asthmatic	2.543	1.815	3.562			
POVLL 200-299% FPL vs 300% FPL and Above	2 Previous Asthmatic	1.037	0.866	1.241			
POVLL 200-299% FPL vs 300% FPL and Above	3 Non-Asthmatic	0.906	0.805	1.020			
FSLEV Food Insecurity w/ Hunger vs Inapplicable / >=200% FPL	2 Previous Asthmatic	0.263	0.107	0.649			
FSLEV Food Insecurity w/ Hunger vs Inapplicable / >=200% FPL	3 Non-Asthmatic	0.265	0.168	0.418			
FSLEV Food Insecurity w/o Hunger vs Inapplicable / >=200% FPL	2 Previous Asthmatic	0.359	0.169	0.761			
FSLEV Food Insecurity w/o Hunger vs Inapplicable / >=200% FPL	3 Non-Asthmatic	0.345	0.240	0.496			
AK4 Family Business or Farm vs Government	2 Previous Asthmatic	1.134	0.573	2.243			
AK4 Family Business or Farm vs Government	3 Non-Asthmatic	1.057	0.714	1.564			
AK4 Inapplicable vs Government	2 Previous Asthmatic	0.869	0.676	1.118			
AK4 Inapplicable vs Government	3 Non-Asthmatic	1.026	0.887	1.186			
AK4 Private Company, Non-Profit Org vs Government	2 Previous Asthmatic	1.182	0.908	1.539			
AK4 Private Company, Non-Profit Org vs Government	3 Non-Asthmatic	1.262	1.091	1.459			
AK4 Self-Employed vs Government	2 Previous Asthmatic	1.373	1.034	1.825			
AK4 Self-Employed vs Government	3 Non-Asthmatic	1.309	1.093	1.568			
healthplan Aetna vs Inapplicable	2 Previous Asthmatic	1.125	0.739	1.712			
healthplan Aetna vs Inapplicable	3 Non-Asthmatic	0.958	0.732	1.254			
healthplan Blue Cross vs Inapplicable	2 Previous Asthmatic	0.975	0.742	1.281			
healthplan Blue Cross vs Inapplicable	3 Non-Asthmatic	0.820	0.697	0.964			
healthplan Blue Shield vs Inapplicable	2 Previous Asthmatic	0.820	0.558	1.204			
healthplan Blue Shield vs Inapplicable	3 Non-Asthmatic	0.701	0.556	0.884			
healthplan Cigna Health Care vs Inapplicable	2 Previous Asthmatic	0.571	0.298	1.094			
healthplan Cigna Health Care vs Inapplicable	3 Non-Asthmatic	0.636	0.439	0.923			
healthplan Health Net vs Inapplicable	2 Previous Asthmatic	0.792	0.475	1.322			
healthplan Health Net vs Inapplicable	3 Non-Asthmatic	0.705	0.503	0.990			
healthplan Kaiser vs Inapplicable	2 Previous Asthmatic	0.876	0.656	1.170			
healthplan Kaiser vs Inapplicable	3 Non-Asthmatic	0.651	0.548	0.772			
healthplan Medicare/Medi-Cal vs Inapplicable	2 Previous Asthmatic	0.752	0.582	0.973			
healthplan Medicare/Medi-Cal vs Inapplicable	3 Non-Asthmatic	0.601	0.517	0.698			
healthplan Other vs Inapplicable	2 Previous Asthmatic	1.050	0.727	1.518			
healthplan Other vs Inapplicable	3 Non-Asthmatic	0.823	0.637	1.064			
healthplan United Healthcare vs Inapplicable	2 Previous Asthmatic	0.922	0.665	1.277			
healthplan United Healthcare vs Inapplicable	3 Non-Asthmatic	0.698	0.541	0.902			
NOTE: The degrees of freedom in computing the confidence limits is 160.							