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

Number of Observations Read	877
Number of Observations Used	876

Response Profile			
Ordered Value	herd	Total Frequency	
1	No	182	
2	Yes	694	

Probability modeled is herd='No'.

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

Model Fit Statistics				
Criterion	Intercept Only	Intercept and Covariates		
AIC	897.232	698.683		
sc	902.007	760.763		
-2 Log L	895.232	672.683		

Testing Global Null Hypothesis: BETA=0				
Test	Chi-Square	DF	Pr > ChiSq	
Likelihood Ratio	222.5491	12	<.0001	
Score	184.5102	12	<.0001	
Wald	127.3206	12	<.0001	

Analysis of Maximum Likelihood Estimates					
Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	22.9641	39.1714	0.3437	0.5577
tot_pop	1	-8.25E-6	4.86E-6	2.8830	0.0895
male_pct	1	-0.0103	0.0198	0.2696	0.6036
median_age	1	-0.00206	0.0144	0.0204	0.8865
hispanic_latino_pct	1	-0.2708	0.3921	0.4768	0.4899
white_pct	1	-0.2208	0.3921	0.3171	0.5734
black_pct	1	-0.2404	0.3980	0.3647	0.5459
aian_pct	1	-0.2128	0.3921	0.2944	0.5874
asian_pct	1	-0.3319	0.3950	0.7060	0.4008
nhopi_pct	1	-0.5645	0.4360	1.6768	0.1954
other_pct	1	-0.1105	0.1972	0.3139	0.5753
no_insurance_pct	1	0.0264	0.0130	4.0992	0.0429
bachelor_degree_pct	1	0.000041	0.00657	0.0000	0.9950

Odds Ratio Estimates				
Effect	Point Estimate	95% Wald Confidence Limits		
tot_pop	1.000	1.000	1.000	
male_pct	0.990	0.952	1.029	
median_age	0.998	0.970	1.027	
hispanic_latino_pct	0.763	0.354	1.645	
white_pct	0.802	0.372	1.729	
black_pct	0.786	0.360	1.716	
aian_pct	0.808	0.375	1.743	
asian_pct	0.718	0.331	1.556	
nhopi_pct	0.569	0.242	1.336	
other_pct	0.895	0.608	1.318	
no_insurance_pct	1.027	1.001	1.053	
bachelor_degree_pct	1.000	0.987	1.013	

Association of Predicted Probabilities and Observed Responses				
Percent Concordant	83.3	Somers' D	0.667	
Percent Discordant	16.5	Gamma	0.669	
Percent Tied	0.2	Tau-a	0.220	
Pairs	126308	С	0.834	

Partition for the Hosmer and Lemeshow Test						
		herd	= No	herd :	= Yes	
Group	Total	Observed	Expected	Observed	Expected	
1	88	0	0.42	88	87.58	
2	88	0	1.73	88	86.27	
3	88	2	2.86	86	85.14	
4	88	7	5.15	81	82.85	
5	88	11	9.06	77	78.94	
6	88	18	14.99	70	73.01	
7	88	22	23.10	66	64.90	
8	88	26	32.47	62	55.53	
9	88	42	41.25	46	46.75	
10	84	54	50.97	30	33.03	

Hosmer and Lemeshow Goodness-of-Fit Test				
Chi-Square	DF	Pr > ChiSq		
6.9542	8	0.5416		

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

Number of Observations Read	862
Number of Observations Used	861

Response Profile			
Ordered Tota Value herd Frequency			
1	No	279	
2	Yes	582	

Probability modeled is herd='No'.

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

Model Fit Statistics				
Intercept and Criterion Only Covariates				
AIC	1086.651	826.159		
sc	1091.409	888.014		
-2 Log L	1084.651	800.159		

Testing Global Null Hypothesis: BETA=0					
Test Chi-Square DF Pr > ChiSq					
Likelihood Ratio	284.4924	12	<.0001		
Score	235.5881	12	<.0001		
Wald	168.6177	12	<.0001		

Analysis of Maximum Likelihood Estimates						
Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq	
Intercept	1	-8.9128	31.3379	0.0809	0.7761	
tot_pop	1	-1.2E-6	2.029E-6	0.3469	0.5558	
male_pct	1	0.0361	0.0181	3.9706	0.0463	
median_age	1	-0.00975	0.0133	0.5339	0.4650	
hispanic_latino_pct	1	0.0261	0.3129	0.0070	0.9335	
white_pct	1	0.0816	0.3127	0.0681	0.7942	
black_pct	1	0.0607	0.3161	0.0369	0.8477	
aian_pct	1	0.0692	0.3137	0.0487	0.8254	
asian_pct	1	-0.0291	0.3137	0.0086	0.9260	
nhopi_pct	1	-0.0689	0.3313	0.0433	0.8351	
other_pct	1	0.0365	0.1600	0.0520	0.8196	
no_insurance_pct	1	0.0365	0.0145	6.3455	0.0118	
bachelor_degree_pct	1	0.0137	0.00645	4.5046	0.0338	

Odds Ratio Estimates				
Effect	Point Estimate	95% Wald Confidence Limits		
tot_pop	1.000	1.000	1.000	
male_pct	1.037	1.001	1.074	
median_age	0.990	0.965	1.017	
hispanic_latino_pct	1.026	0.556	1.895	
white_pct	1.085	0.588 2.003		
black_pct	1.063	0.572	1.974	
aian_pct	1.072	0.579	1.982	
asian_pct	0.971	0.525	1.796	
nhopi_pct	0.933	0.488	1.787	
other_pct	1.037	0.758	1.419	
no_insurance_pct	1.037	1.008	1.067	
bachelor_degree_pct	1.014	1.001	1.027	

Association of Predicted Probabilities and Observed Responses					
Percent Concordant 83.4 Somers' D 0.670					
Percent Discordant	16.4	Gamma	0.671		
Percent Tied 0.1 Tau-a 0.29					
Pairs 162378 c 0.8					

Partition for the Hosmer and Lemeshow Test						
		herd	= No	herd :	= Yes	
Group	Total	Observed	Expected	Observed	Expected	
1	86	2	1.44	84	84.56	
2	86	4	3.54	82	82.46	
3	86	7	6.43	79	79.57	
4	86	4	11.83	82	74.17	
5	86	23	19.16	63	66.84	
6	86	29	28.87	57	57.13	
7	86	36	38.76	50	47.24	
8	86	52	47.90	34	38.10	
9	86	55	55.18	31	30.82	
10	87	67	65.89	20	21.11	

Hosmer and Lemeshow Goodness-of-Fit Test			
Chi-Square DF Pr > ChiSq			
8.5716	8	0.3797	

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

Number of Observations Read	857
Number of Observations Used	856

Response Profile			
Ordered Total Value herd Frequency			
1	No	305	
2	Yes	551	

Probability modeled is herd='No'.

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

Model Fit Statistics			
Criterion	Intercept Only	Intercept and Covariates	
AIC	1116.965	821.227	
sc	1121.717	883.006	
-2 Log L	1114.965	795.227	

Testing Global Null Hypothesis: BETA=0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	319.7382	12	<.0001
Score	271.1970	12	<.0001
Wald	189.9920	12	<.0001

Analysis of Maximum Likelihood Estimates					
Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	23.9151	37.3249	0.4105	0.5217
tot_pop	1	-6.94E-7	1.274E-6	0.2969	0.5858
male_pct	1	-0.00013	0.0185	0.0000	0.9946
median_age	1	-0.00557	0.0141	0.1556	0.6932
hispanic_latino_pct	1	-0.2981	0.3730	0.6387	0.4242
white_pct	1	-0.2319	0.3727	0.3872	0.5338
black_pct	1	-0.2400	0.3772	0.4046	0.5247
aian_pct	1	-0.1672	0.3744	0.1995	0.6551
asian_pct	1	-0.3109	0.3737	0.6923	0.4054
nhopi_pct	1	-0.2610	0.4012	0.4232	0.5153
other_pct	1	-0.1592	0.1882	0.7153	0.3977
no_insurance_pct	1	0.0780	0.0161	23.4565	<.0001
bachelor_degree_pct	1	0.0132	0.00643	4.1989	0.0404

Odds Ratio Estimates				
Effect	Point Estimate	95% Wald Confidence Limits		
tot_pop	1.000	1.000	1.000	
male_pct	1.000	0.964	1.037	
median_age	0.994	0.967	1.022	
hispanic_latino_pct	0.742	0.357	1.542	
white_pct	0.793	0.382	1.646	
black_pct	0.787	0.376	1.648	
aian_pct	0.846	0.406	1.762	
asian_pct	0.733	0.352	1.524	
nhopi_pct	0.770	0.351	1.691	
other_pct	0.853	0.590	1.233	
no_insurance_pct	1.081	1.048	1.116	
bachelor_degree_pct	1.013	1.001	1.026	

Association of Predicted Probabilities and Observed Responses			
Percent Concordant	84.3	Somers' D	0.687
Percent Discordant	15.6	Gamma	0.688
Percent Tied	0.1	Tau-a	0.315
Pairs	168055	С	0.843

Partition for the Hosmer and Lemeshow Test						
		herd	= No	herd :	= Yes	
Group	Total	Observed	Expected	Observed	Expected	
1	86	3	2.02	83	83.98	
2	86	3	4.28	83	81.72	
3	86	6	7.87	80	78.13	
4	86	18	13.68	68	72.32	
5	86	17	22.04	69	63.96	
6	86	34	31.14	52	54.86	
7	86	36	41.36	50	44.64	
8	86	55	52.42	31	33.58	
9	86	64	61.07	22	24.93	
10	82	69	69.11	13	12.89	

Hosmer and Lemeshow Goodness-of-Fit Test			
Chi-Square	DF	Pr > ChiSq	
7.1150	8	0.5243	

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

Number of Observations Read	851
Number of Observations Used	850

Response Profile			
Ordered Total Value herd Frequency			
1	No	229	
2	Yes	621	

Probability modeled is herd='No'.

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

Model Fit Statistics			
Criterion	Intercept Only	Intercept and Covariates	
AIC	992.544	780.788	
sc	997.289	842.476	
-2 Log L	990.544	754.788	

Testing Global Null Hypothesis: BETA=0				
Test Chi-Square DF Pr > ChiSq				
Likelihood Ratio	235.7564	12	<.0001	
Score	196.0384	12	<.0001	
Wald	140.6603	12	<.0001	

Analysis of Maximum Likelihood Estimates					
Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	10.8778	29.7774	0.1334	0.7149
tot_pop	1	8.955E-7	5.71E-7	2.4597	0.1168
male_pct	1	0.00533	0.0189	0.0798	0.7775
median_age	1	-0.00336	0.0133	0.0638	0.8006
hispanic_latino_pct	1	-0.1673	0.2967	0.3181	0.5727
white_pct	1	-0.1104	0.2964	0.1388	0.7095
black_pct	1	-0.0903	0.2997	0.0908	0.7631
aian_pct	1	-0.1082	0.2966	0.1331	0.7152
asian_pct	1	-0.2124	0.2976	0.5095	0.4754
nhopi_pct	1	0.1168	0.3294	0.1257	0.7229
other_pct	1	-0.0746	0.1506	0.2452	0.6205
no_insurance_pct	1	0.0547	0.0159	11.8226	0.0006
bachelor_degree_pct	1	0.0141	0.00647	4.7746	0.0289

Odds Ratio Estimates				
Effect	Point Estimate	95% Wald Confidence Limits		
tot_pop	1.000	1.000	1.000	
male_pct	1.005	0.969	1.043	
median_age	0.997	0.971	1.023	
hispanic_latino_pct	0.846	0.473	1.513	
white_pct	0.895	0.501	1.601	
black_pct	0.914	0.508	1.644	
aian_pct	0.897	0.502	1.605	
asian_pct	0.809	0.451	1.449	
nhopi_pct	1.124	0.589	2.143	
other_pct	0.928	0.691	1.247	
no_insurance_pct	1.056	1.024	1.090	
bachelor_degree_pct	1.014	1.001	1.027	

Association of Predicted Probabilities and Observed Responses			
Percent Concordant	82.2	Somers' D	0.646
Percent Discordant	17.6	Gamma	0.647
Percent Tied	0.2	Tau-a	0.254
Pairs	142209	с	0.823

Partition for the Hosmer and Lemeshow Test						
		herd	= No	herd = Yes		
Group	Total	Observed	Expected	Observed	Expected	
1	85	1	1.06	84	83.94	
2	85	2	2.48	83	82.52	
3	85	6	5.14	79	79.86	
4	85	8	9.52	77	75.48	
5	85	14	15.20	71	69.80	
6	85	21	22.09	64	62.91	
7	85	31	29.75	54	55.25	
8	85	43	38.80	42	46.20	
9	85	43	46.63	42	38.37	
10	85	60	58.34	25	26.66	

Hosmer and Lemeshow Goodness-of-Fit Test			
Chi-Square DF Pr > ChiSo			
2.4074	8	0.9659	

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

Number of Observations Read	855
Number of Observations Used	854

Response Profile		
Ordered Value herd		Total Frequency
1	No	200
2	Yes	654

Probability modeled is herd='No'.

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

Model Fit Statistics			
Criterion	Intercept Only	Intercept and Covariates	
AIC	931.651	743.396	
sc	936.401	805.145	
-2 Log L	929.651	717.396	

Testing Global Null Hypothesis: BETA=0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	212.2552	12	<.0001
Score	180.5545	12	<.0001
Wald	130.8620	12	<.0001

Analysis of Maximum Likelihood Estimates					
Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	5.4787	32.9412	0.0277	0.8679
tot_pop	1	-5.64E-6	3.728E-6	2.2916	0.1301
male_pct	1	0.0203	0.0184	1.2189	0.2696
median_age	1	0.000643	0.0129	0.0025	0.9604
hispanic_latino_pct	1	-0.1106	0.3288	0.1131	0.7366
white_pct	1	-0.0626	0.3285	0.0363	0.8489
black_pct	1	-0.0609	0.3328	0.0335	0.8547
aian_pct	1	-0.0887	0.3289	0.0727	0.7875
asian_pct	1	-0.1607	0.3299	0.2373	0.6262
nhopi_pct	1	-0.1552	0.3480	0.1990	0.6556
other_pct	1	-0.0364	0.1662	0.0479	0.8267
no_insurance_pct	1	0.0452	0.0179	6.3652	0.0116
bachelor_degree_pct	1	0.00310	0.00668	0.2158	0.6423

Odds Ratio Estimates			
Effect	Point Estimate	95% Wald Confidence Limits	
tot_pop	1.000	1.000	1.000
male_pct	1.020	0.984	1.058
median_age	1.001	0.976	1.026
hispanic_latino_pct	0.895	0.470	1.705
white_pct	0.939	0.493	1.788
black_pct	0.941	0.490	1.806
aian_pct	0.915	0.480	1.744
asian_pct	0.852	0.446	1.626
nhopi_pct	0.856	0.433	1.693
other_pct	0.964	0.696	1.336
no_insurance_pct	1.046	1.010	1.084
bachelor_degree_pct	1.003	0.990	1.016

Association of Predicted Probabilities and Observed Responses				
Percent Concordant 81.9 Somers' D 0.639				
Percent Discordant17.9Gamma0.640				
Percent Tied 0.2 Tau-a 0.230				
Pairs 130800 c 0.820				

Partition for the Hosmer and Lemeshow Test					
		herd	= No	herd :	= Yes
Group	Total	Observed	Expected	Observed	Expected
1	85	2	0.84	83	84.16
2	85	1	2.57	84	82.43
3	85	3	4.23	82	80.77
4	85	6	7.01	79	77.99
5	85	11	11.35	74	73.65
6	85	20	17.88	65	67.12
7	85	26	25.10	59	59.90
8	85	36	33.71	49	51.29
9	85	45	41.46	40	43.54
10	89	50	55.85	39	33.15

Hosmer and Lemeshow Goodness-of-Fit Test			
Chi-Square DF Pr > ChiSo			
6.0006	8	0.6472	

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

Number of Observations Read	793
Number of Observations Used	792

Response Profile			
Ordered Value	Total Frequency		
1	No	98	
2	Yes	694	

Probability modeled is herd='No'.

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

Model Fit Statistics			
Criterion	Intercept Only	Intercept and Covariates	
AIC	594.901	486.988	
sc	599.575	547.758	
-2 Log L	592.901	460.988	

Testing Global Null Hypothesis: BETA=0					
Test Chi-Square DF Pr > ChiSq					
Likelihood Ratio	131.9122	12	<.0001		
Score	117.2904	12	<.0001		
Wald	78.4319	12	<.0001		

Analysis of Maximum Likelihood Estimates					
Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	74.9950	41.7941	3.2198	0.0728
tot_pop	1	-0.00002	8.004E-6	3.8838	0.0488
male_pct	1	-0.00240	0.0249	0.0093	0.9231
median_age	1	0.0337	0.0179	3.5496	0.0596
hispanic_latino_pct	1	-0.8002	0.4176	3.6715	0.0554
white_pct	1	-0.7657	0.4171	3.3705	0.0664
black_pct	1	-0.7625	0.4249	3.2198	0.0728
aian_pct	1	-0.8185	0.4180	3.8352	0.0502
asian_pct	1	-0.8706	0.4208	4.2794	0.0386
nhopi_pct	1	-0.6360	0.4500	1.9978	0.1575
other_pct	1	-0.3417	0.2102	2.6442	0.1039
no_insurance_pct	1	0.0299	0.0222	1.8154	0.1779
bachelor_degree_pct	1	-0.0216	0.00945	5.1991	0.0226

Odds Ratio Estimates			
Effect	Point Estimate	95% Wald Confidence Limits	
tot_pop	1.000	1.000 1.000	
male_pct	0.998	0.950	1.047
median_age	1.034	0.999	1.071
hispanic_latino_pct	0.449	0.198	1.018
white_pct	0.465	0.205	1.053
black_pct	0.467	0.203	1.073
aian_pct	0.441	0.194	1.001
asian_pct	0.419	0.184	0.955
nhopi_pct	0.529	0.219	1.279
other_pct	0.711	0.471	1.073
no_insurance_pct	1.030	0.986	1.076
bachelor_degree_pct	0.979	0.961	0.997

Association of Predicted Probabilities and Observed Responses					
Percent Concordant 83.1 Somers' D 0.665					
Percent Discordant 16.6 Gamma 0.6					
Percent Tied 0.3 Tau-a 0.14					
Pairs 68012 c 0.833					

Partition for the Hosmer and Lemeshow Test						
		herd = No		herd :	= Yes	
Group	Total	Observed	Expected	Observed	Expected	
1	79	0	0.11	79	78.89	
2	79	1	0.75	78	78.25	
3	79	0	1.56	79	77.44	
4	79	2	2.43	77	76.57	
5	79	5	3.93	74	75.07	
6	79	4	6.32	75	72.68	
7	79	13	10.07	66	68.93	
8	79	19	15.10	60	63.90	
9	79	20	22.74	59	56.26	
10	81	34	34.99	47	46.01	

Hosmer and Lemeshow Goodness-of-Fit Test				
Chi-Square DF Pr > ChiSq				
5.8303	8	0.6662		

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

Number of Observations Read	788
Number of Observations Used	787

Response Profile			
Ordered Total Value herd Frequency			
1	No	105	
2	Yes	682	

Probability modeled is herd='No'.

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

Model Fit Statistics				
Criterion Intercept ar Covariate				
AIC	620.319	502.017		
sc	624.987	562.704		
-2 Log L	618.319	476.017		

Testing Global Null Hypothesis: BETA=0					
Test Chi-Square DF Pr > ChiSq					
Likelihood Ratio	142.3017	12	<.0001		
Score	106.7570	12	<.0001		
Wald	73.4141	12	<.0001		

Analysis of Maximum Likelihood Estimates					
Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	82.0739	41.1167	3.9845	0.0459
tot_pop	1	-0.00002	9.199E-6	5.3060	0.0213
male_pct	1	-0.0279	0.0258	1.1731	0.2788
median_age	1	0.0126	0.0177	0.5061	0.4768
hispanic_latino_pct	1	-0.8405	0.4105	4.1927	0.0406
white_pct	1	-0.8141	0.4100	3.9424	0.0471
black_pct	1	-0.8367	0.4187	3.9939	0.0457
aian_pct	1	-0.8723	0.4110	4.5042	0.0338
asian_pct	1	-0.9940	0.4161	5.7063	0.0169
nhopi_pct	1	-0.6602	0.4419	2.2325	0.1351
other_pct	1	-0.3691	0.2068	3.1865	0.0742
no_insurance_pct	1	0.0128	0.0222	0.3335	0.5636
bachelor_degree_pct	1	-0.00719	0.00900	0.6379	0.4245

Odds Ratio Estimates				
Effect	Point Estimate	95% Wald Confidence Limits		
tot_pop	1.000	1.000	1.000	
male_pct	0.972	0.925	1.023	
median_age	1.013	0.978	1.048	
hispanic_latino_pct	0.432	0.193	0.965	
white_pct	0.443	0.198	0.990	
black_pct	0.433	0.191	0.984	
aian_pct	0.418	0.187	0.935	
asian_pct	0.370	0.164	0.837	
nhopi_pct	0.517	0.217	1.229	
other_pct	0.691	0.461	1.037	
no_insurance_pct	1.013	0.970	1.058	
bachelor_degree_pct	0.993	0.975	1.011	

Association of Predicted Probabilities and Observed Responses				
Percent Concordant	83.0	Somers' D	0.662	
Percent Discordant	16.8	Gamma	0.664	
Percent Tied	0.3	Tau-a	0.153	
Pairs	71610	С	0.831	

Partition for the Hosmer and Lemeshow Test					
		herd	= No	herd :	= Yes
Group	Total	Observed	Expected	Observed	Expected
1	79	0	0.02	79	78.98
2	79	0	0.31	79	78.69
3	79	0	1.29	79	77.71
4	79	5	2.85	74	76.15
5	79	6	4.50	73	74.50
6	79	4	7.31	75	71.69
7	79	11	11.72	68	67.28
8	79	23	17.82	56	61.18
9	79	23	25.17	56	53.83
10	76	33	33.99	43	42.01

Hosmer and Lemeshow Goodness-of-Fit Test				
Chi-Square	DF	Pr > ChiSq		
7.8216	8	0.4511		