Logistic regression

Dependent Y	fatal_enc_binary
Method	Enter
Sample size	82907
Positive cases ^a	6338 (7.64%)
Negative cases ^b	76569 (92.36%)
a fatal enc hinary =	1

fatal_enc_binary = 1

Overall Model Fit

Null model -2 Log Likelihood	44770.613
Full model -2 Log Likelihood	43895.030
Chi-squared	875.583
DF	1
Significance level	P < 0.0001
Cox & Snell R ²	0.01051
Nagelkerke R ²	0.02518

Coefficients and Standard Errors

Variable	Coefficient	Std. Error	Wald	<u>P</u>
IncomeE_10k	-0.13265	0.0048988	733.2351	<0.0001
Constant	-1.63674	0.031975	2620.2647	<0.0001

Odds Ratios and 95% Confidence Intervals

Variable	Odds ratio	95% CI
IncomeE_10k	0.8758	0.8674 to 0.8842

Hosmer & Lemeshow test

Chi-squared	15.9182
<u>DF</u>	8
Significance level	P = 0.0436

b fatal_enc_binary = 0

Contingency table for Hosmer & Lemeshow test [Hide]

Croun	Y=	0	Y=1		Total
Group	Observed	Expected	Observed	Expected	TOtal
1	8022	8054.862	269	236.138	8291
2	7907	7898.755	384	392.245	8291
3	7826	7799.583	459	485.417	8285
4	7753	7732.901	538	558.099	8291
5	7702	7670.779	589	620.221	8291
6	7606	7612.476	683	676.524	8289
7	7588	7559.997	703	731.003	8291
8	7520	7502.276	771	788.724	8291
9	7380	7431.122	911	859.878	8291
10	7265	7306.248	1031	989.752	8296

Classification table (cut-off value p=0.5)

Actual group	Predicted group		Dereent correct	
	0	1	Percent correct	
Y = 0	76569	0	100.00%	
Y = 1	6338	0	0.00%	
Percent of cases correctly classified			92.36%	

ROC curve analysis

Area under the ROC curve (AUC)	0.609
Standard Error	0.00356
95% Confidence interval	0.606 to 0.613

 $\label{lem:csv} $$C:\Users\modou\OneDrive\Documents\all_tracts_2020_interaction_terms.csv Saturday, March 9, 2024 23:34$

MedCalc[®] Statistical Software version 22.021 (MedCalc Software Ltd, Ostend, Belgium; https://www.medcalc.org; 2024)