**Logistic regression**

|  |  |
| --- | --- |
| Dependent Y | fatal\_enc\_binary |

|  |  |
| --- | --- |
| Method | Enter |

|  |  |
| --- | --- |
| Sample size | 80775 |
| Positive cases a | 4440 (5.50%) |
| Negative cases b | 76335 (94.50%) |

a fatal\_enc\_binary = 1  
b fatal\_enc\_binary = 0

**Overall Model Fit**

|  |  |
| --- | --- |
| Null model -2 Log Likelihood | 34392.342 |
| Full model -2 Log Likelihood | 33694.756 |
| Chi-squared | 697.586 |
| DF | 1 |
| Significance level | P < 0.0001 |
| Cox & Snell R2 | 0.008599 |
| Nagelkerke R2 | 0.02480 |

**Coefficients and Standard Errors**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Variable | Coefficient | Std. Error | Wald | P |
| IncomeE\_10k | -0.14135 | 0.0058806 | 577.7430 | <0.0001 |
| Constant | -1.93979 | 0.037811 | 2631.8757 | <0.0001 |

**Odds Ratios and 95% Confidence Intervals**

|  |  |  |
| --- | --- | --- |
| Variable | Odds ratio | 95% CI |
| IncomeE\_10k | 0.8682 | 0.8582 to 0.8783 |

**Hosmer & Lemeshow test**

|  |  |
| --- | --- |
| Chi-squared | 59.9713 |
| DF | 8 |
| Significance level | P < 0.0001 |

**Contingency table for Hosmer & Lemeshow test** [[Show]](javascript:showdiv('d0','d1','table1');)

**Contingency table for Hosmer & Lemeshow test** [[Hide]](javascript:hidediv('d0','d1','table1');)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Group | Y=0 | | Y=1 | | Total |
| Observed | Expected | Observed | Expected |
| 1 | 7880 | 7926.756 | 198 | 151.244 | 8078 |
| 2 | 7807 | 7817.989 | 272 | 261.011 | 8079 |
| 3 | 7772 | 7750.551 | 308 | 329.449 | 8080 |
| 4 | 7744 | 7703.257 | 343 | 383.743 | 8087 |
| 5 | 7694 | 7648.601 | 385 | 430.399 | 8079 |
| 6 | 7619 | 7604.484 | 459 | 473.516 | 8078 |
| 7 | 7606 | 7562.539 | 472 | 515.461 | 8078 |
| 8 | 7573 | 7519.429 | 507 | 560.571 | 8080 |
| 9 | 7415 | 7462.370 | 664 | 616.630 | 8079 |
| 10 | 7225 | 7339.024 | 832 | 717.976 | 8057 |

**Classification table (cut-off value p=0.5)**

|  |  |  |  |
| --- | --- | --- | --- |
| Actual group | Predicted group | | Percent correct |
| 0 | 1 |
| Y = 0 | 76335 | 0 | 100.00% |
| Y = 1 | 4440 | 0 | 0.00% |
| Percent of cases correctly classified | | | 94.50% |

**ROC curve analysis**

|  |  |
| --- | --- |
| Area under the ROC curve (AUC) | 0.619 |
| Standard Error | 0.00429 |
| 95% Confidence interval | 0.616 to 0.623 |
|  | [Save predicted probabilities](cmd:SAVEPREDICTED) - [Save residuals](cmd:SAVERESIDUALS) |

C:all\_tracts\_2020\_interaction\_terms.csv  
Tuesday, March 5, 2024 04:32  
MedCalc® Statistical Software version 22.021 (MedCalc Software Ltd, Ostend, Belgium; https://www.medcalc.org; 2024)