



HEART ATTACKS





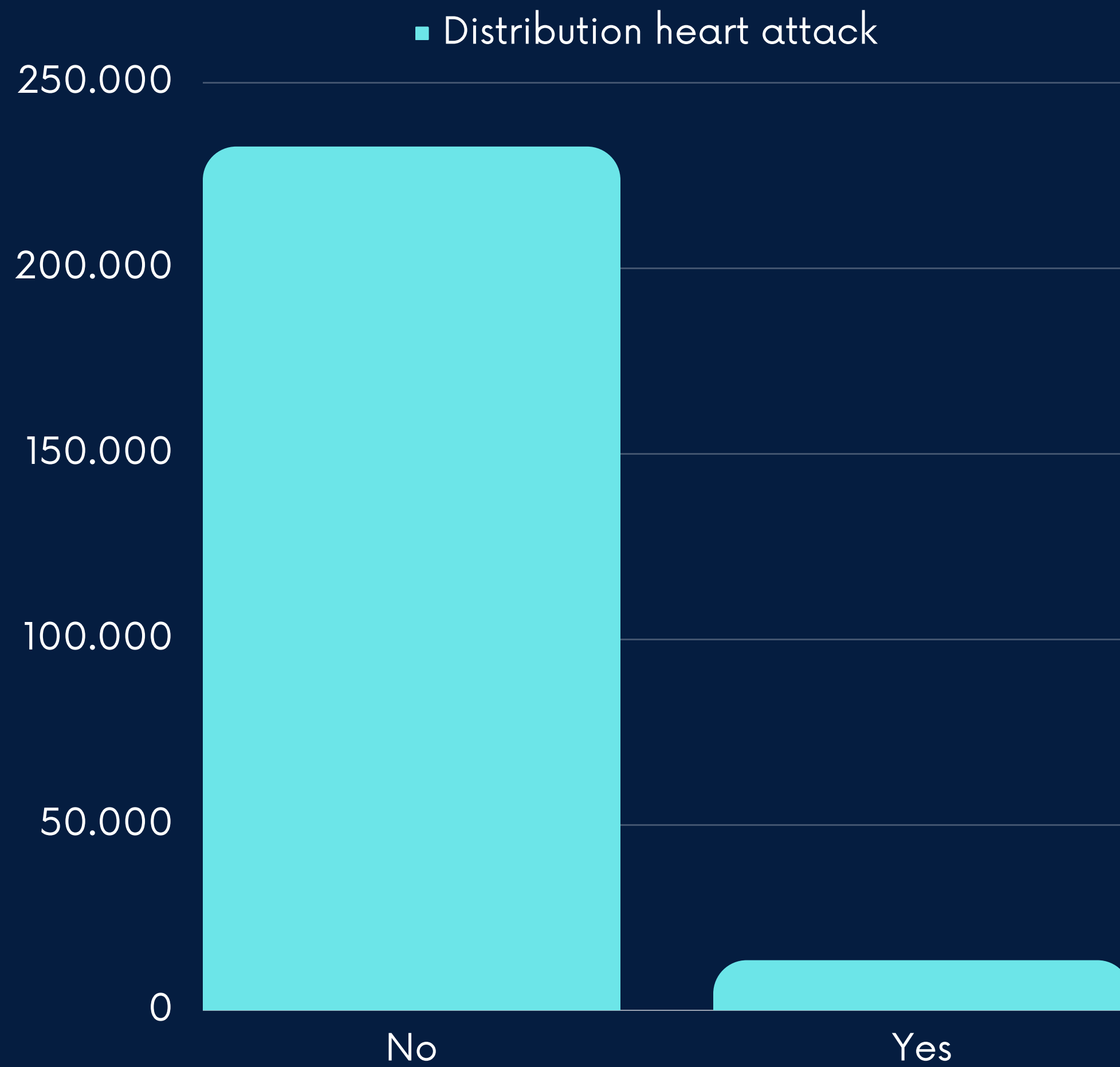
GOALS AND OBJECTIVES

Predict heart attacks

Health is a matter of critical importance. One of the most significant health issues is the prediction of heart attacks. This presentation, will explore how data analysis can assist us in this crucial task.

Awareness campaign

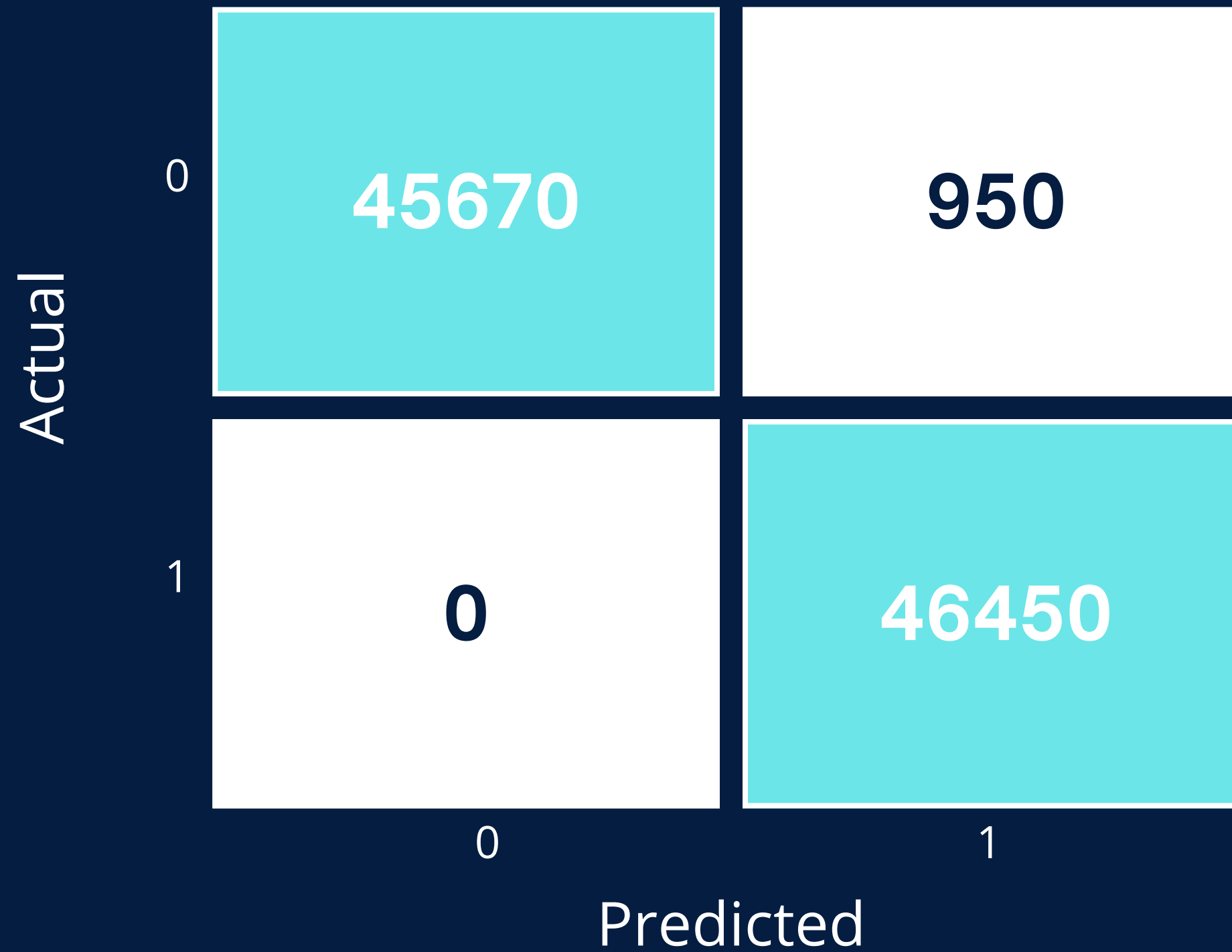
Healthy habits for life



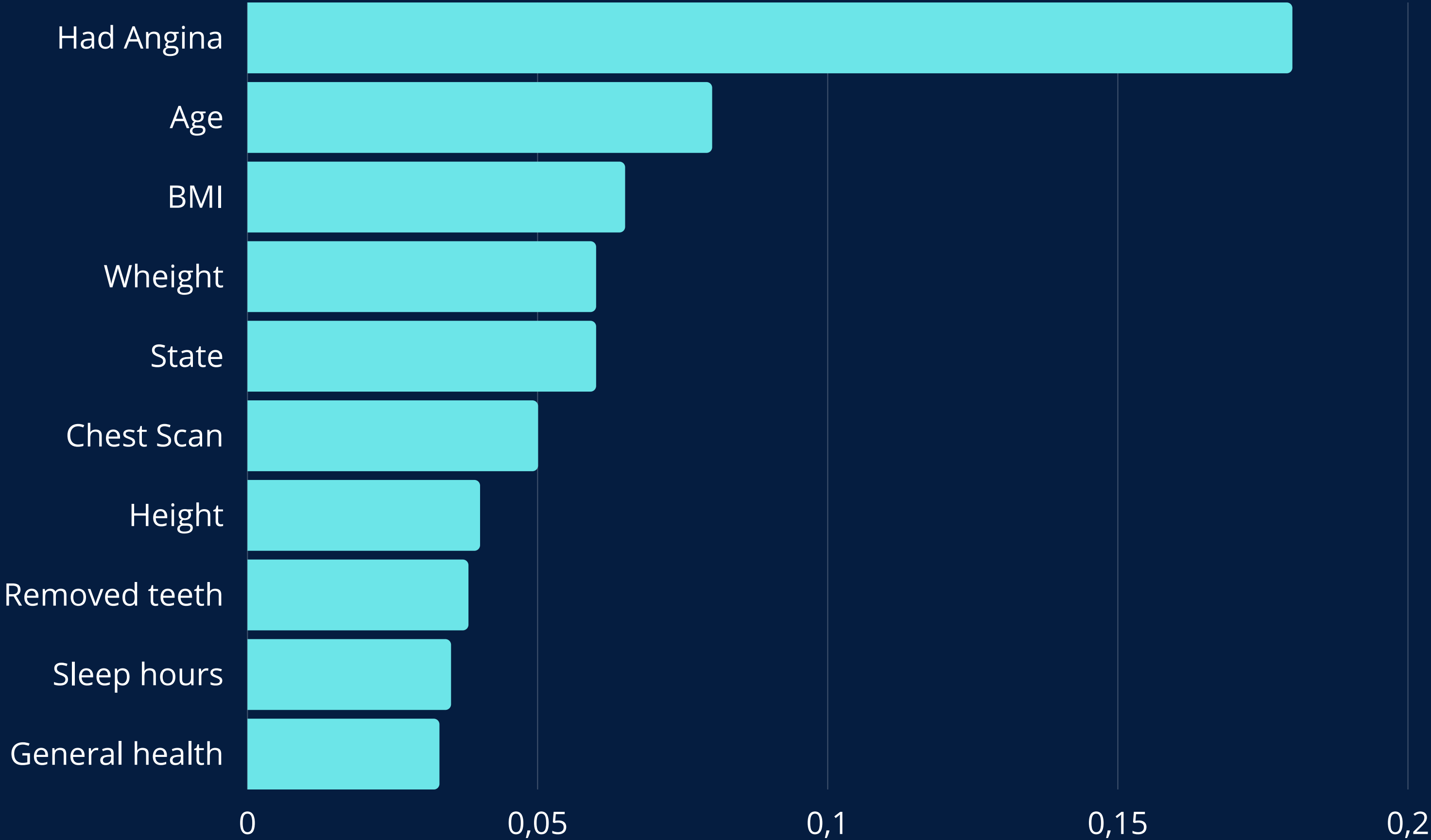
Model Evaluation with Oversampling

Model	Accuracy	Precision	Recall	F1
Logistic Regression	0.801075	0.821917	0.767966	0.794026
Decision Tree	0.974332	0.951104	1.000000	0.974939
Random Forest	0.990208	0.980765	1.000000	0.990289
XGBoost	0.859429	0.853218	0.867729	0.860412

Confusion Matrix for Random Forest (with Random Oversampling)

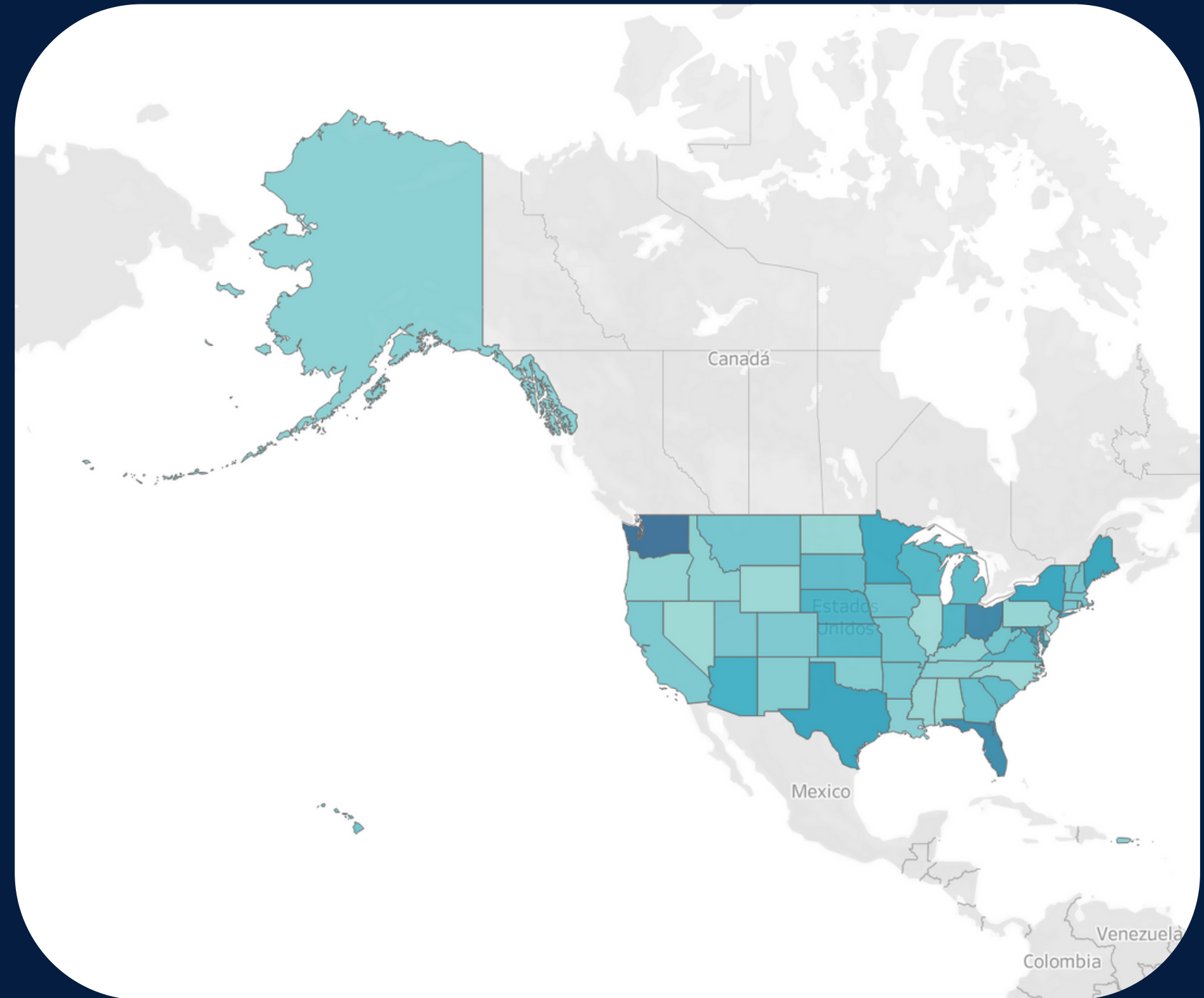


Top 10 Feature Importances - Random Forest (Random Oversampling))



Dashboard

- Implement specific prevention measures
- Identify states with the highest number of cases
- Emphasize the importance of a healthy lifestyle



Awareness campaign

Healthy Habits for Life:

Exercise: 30 mins, 5 days/week, reduces diabetes and heart attack risk

Eat well: Fiber, protein, fruits, and vegetables

Weight: BMI > 30 increases cardiovascular risk

No smoking: Damages circulation, heart, and causes blood clots

Cholesterol: Levels > 200 mg/dl need attention

Blood pressure: Maintain normal levels for heart and kidney health

Blood sugar: Keep glucose < 100 mg/dl for organ health and longevity

THANKS