

### About this dashboard

This dashboard summarizes:

- Model quality on held-out test data
- Error balance (FN vs FP)
- Fairness across subgroups
- Clinical/business interpretation

This model is **not** a diagnostic tool.

It is intended for **early risk flagging / triage support**.

Key metric priority: **Recall on the positive (high-risk) class** to reduce False Negatives.



# Heart Attack Risk Prediction Dashboard

Interactive summary of model performance, fairness, and clinical/business insights.



Model Performance



Fairness & Ethics



Clinical Interpretation

## Overall Model Metrics

	model	recall_pos_class	precision_pos_class	↑ f1_pos_class	roc_auc	accuracy
0	Logistic Regression	0.53	0.50	0.51	0.58	0.50

### Why Recall matters:

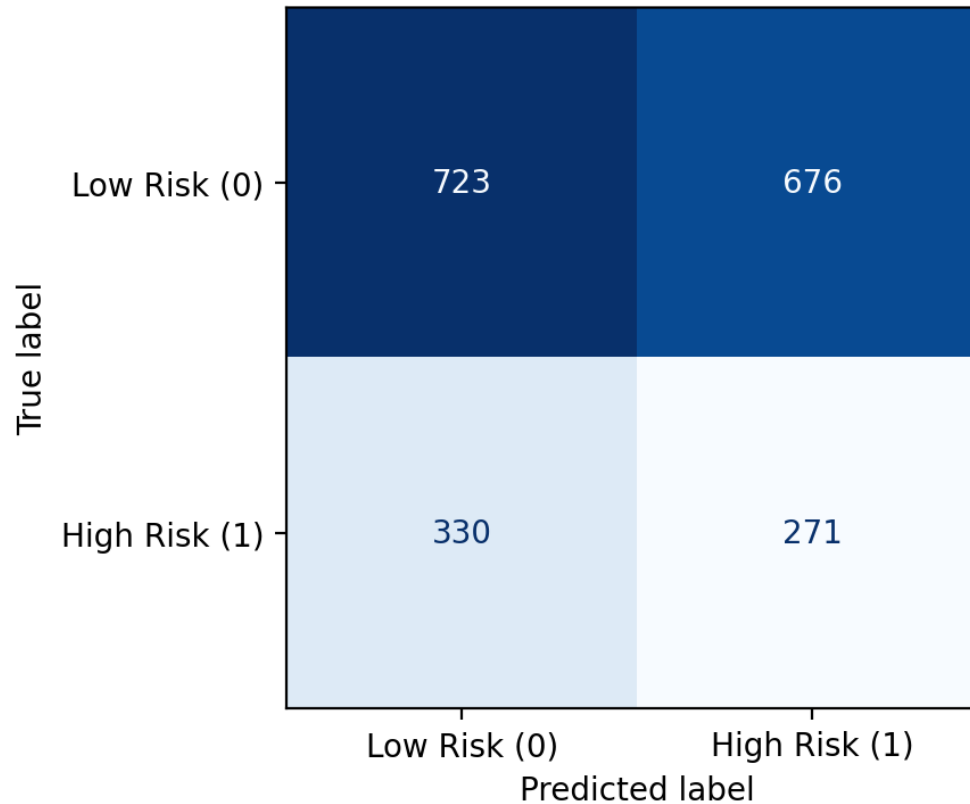
Recall on the positive class tells us how many truly high-risk patients we correctly flag.

Missing a high-risk patient (False Negative) can mean no early intervention.

## Confusion Matrix



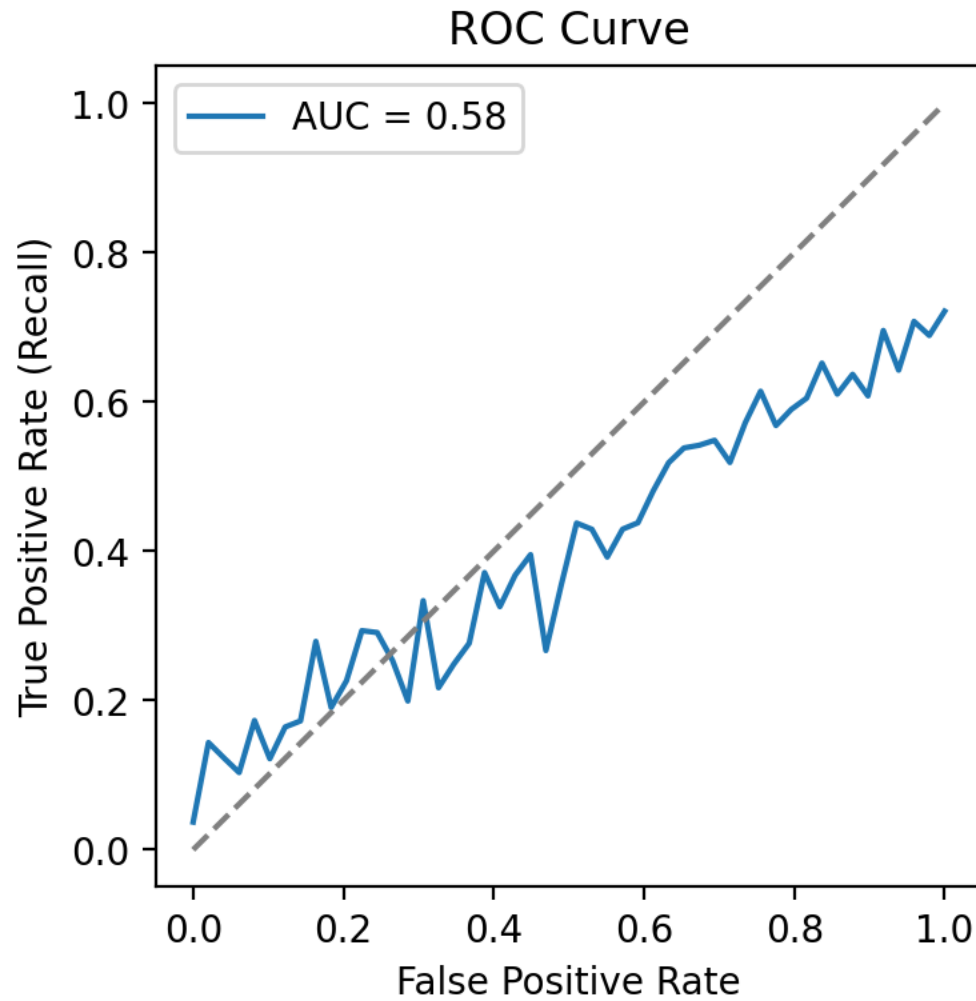
### Confusion Matrix (Test Set)



**Interpretation:**

- True Negatives (TN): 723 patients correctly identified as low risk
- False Positives (FP): 676 patients unnecessarily flagged as high risk
- False Negatives (FN): 330 high-risk patients were *missed* (most clinically concerning)
- True Positives (TP): 271 high-risk patients correctly flagged

**ROC Curve (Test Set)**



AUC describes class separability. AUC close to 1 is ideal. Lower AUC means risk classes overlap and the model is best used as a triage aid, not a final diagnostic system.