Medical Readmission Risk Assessment Report

Humber College Institute of Technology & Advanced Learning

Capstone Project - Computer Programming

Team SweatHogs: Gurmat Singh Sour, Minh Nhat Mai, Yuvraj Grover, Robert Seibel, Mohammed Hasnain Ali

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Patient Information

| Field	Value
Age Group	[50-60)
Gender	Female
Time in Hospital (days)	5
Admission Type	1
Discharge Disposition	1
Number of Medications	10
Lab Procedures	30
Number of Diagnoses	3
Previous Inpatient Visits	1
Previous Outpatient Visits	2
Previous Emergency Visits	0
Diabetes Medication	Yes
A1C Test Result	Norm
Insulin	No
Metformin	Steady

Risk Assessment Results

Readmission Risk Score: 0.740
Risk Level: High Risk
Model Confidence: 74.0%

Risk Assessment Visualization

Readmission Risk Assessment

Patient Score: 0.740

Low Risk (0.0-0.3) | Medium Risk (0.3-0.7) | High Risk (0.7-1.0)
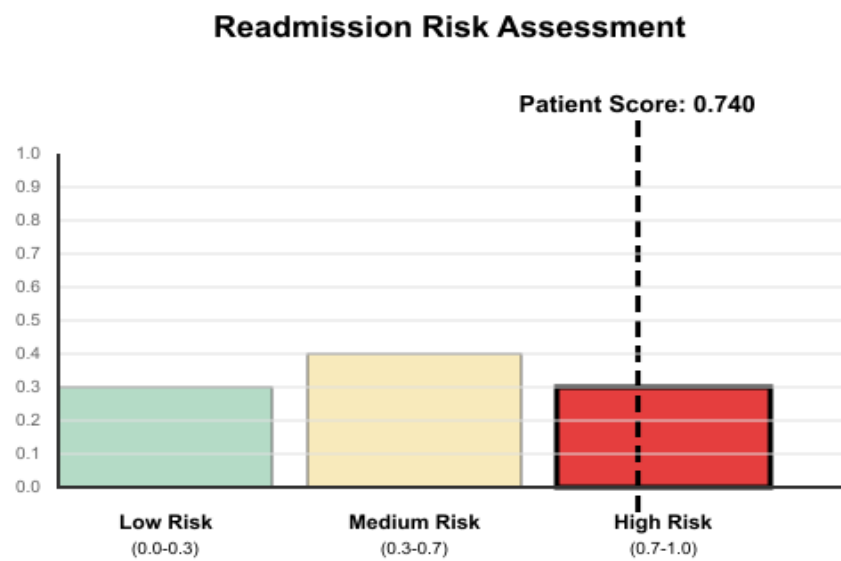
AI-Generated Medical Insights

Despite well-controlled diabetes (normal A1C, metformin steady, no insulin, primary diagnosis 250.00), this female patient in her 50s has a high readmission risk score of 0.74. This suggests the elevated risk is likely driven by her other two diagnoses, the acute reason for her emergency admission, or the complexity of her overall care (10 medications, regimen changed, 30 lab procedures). Focus on robust post-discharge planning, including thorough medication reconciliation and close, multidisciplinary follow-up for all her medical conditions, not just diabetes, to mitigate this elevated readmission risk. Patient education on new medications and symptom monitoring is crucial.

Understanding Your Risk Score

The readmission risk score is calculated using advanced machine learning algorithms that analyze multiple patient factors including medical history, current medications, diagnosis codes, hospital stay characteristics, and previous healthcare utilization patterns.

Risk Categories:
• Low Risk (0.0-0.3): Minimal likelihood of readmission
• Medium Risk (0.3-0.7): Moderate readmission risk requiring attention
• High Risk (0.7-1.0): Elevated readmission risk requiring intensive follow-up

Generated by SweatHogs Medical AI Prediction System

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Team Members: Gurmat Singh, Minh Nhat Mai, Yuvraj Grover, Robert Seibel