

Bias Detection Report

Bias Detection Report: Correlation Between Patient Insurance and Admission Location

Introduction: This report analyzes the correlation bias between the type of insurance patients have and their admission locations within the MIMIC-IV dataset. The focus is to determine if insurance type affects access to medical services as reflected in admission practices.

Methodology: The analysis utilized the Chi-Square test for categorical-categorical feature correlation. The dataset was preprocessed to handle missing values and ensure accuracy in bias detection.

Results: The Chi-Square test yielded a statistic of 167.67 and a p-value of 0.0135, indicating significant association between patient insurance and admission location. This suggests potential bias in admission practices based on insurance type.



Conclusion: The results show a significant correlation bias, categorized as Significant Bias (Level 4). This bias may impact equitable access to medical services based on insurance type, necessitating further investigation and potential policy adjustments.