

Bias Detection Report

Bias Detection Report: Patient Race and Hospital Mortality Rates

This report investigates the potential correlation bias between patient race and hospital mortality rates using the MIMIC-IV dataset.

1. Chi-Square Test:

- Chi-Square Statistic: 49.92

- p-value: 0.0066

- Interpretation: Suggests a significant association between patient race and hospital mortality rates, indicating potential bias.

2. HSIC Analysis:

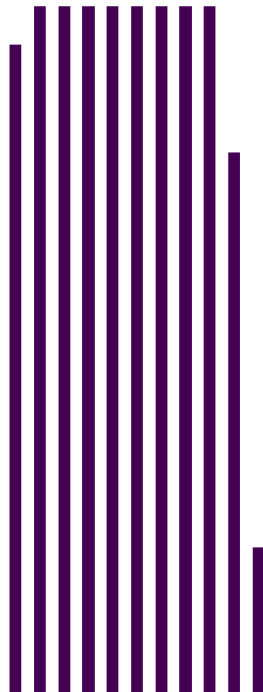
- HSIC Value: $2.56e-11$

- Interpretation: Indicates little to no correlation bias between patient race and hospital mortality rates.

3. P-rule Score Analysis:

- p-rule Score: 0.0

- Interpretation: Indicates significant disparity and potential bias between racial groups based on the 80% rule.



Summary:

The analysis presents mixed results. While the Chi-Square test and p-rule score suggest some level of bias, the HSIC value does not. It is recommended to consider additional methods or contextual

factors when interpreting these findings. The visualizations provide a clear representation of the relationships between the variables.