

Bias Detection Report

Bias Detection Report for MIMIC-IV Dataset

This report analyzes the potential correlation bias between patient age and hospital mortality.

Features Analyzed:

- Patient Age
- Hospital Mortality (hospital_expire_flag)

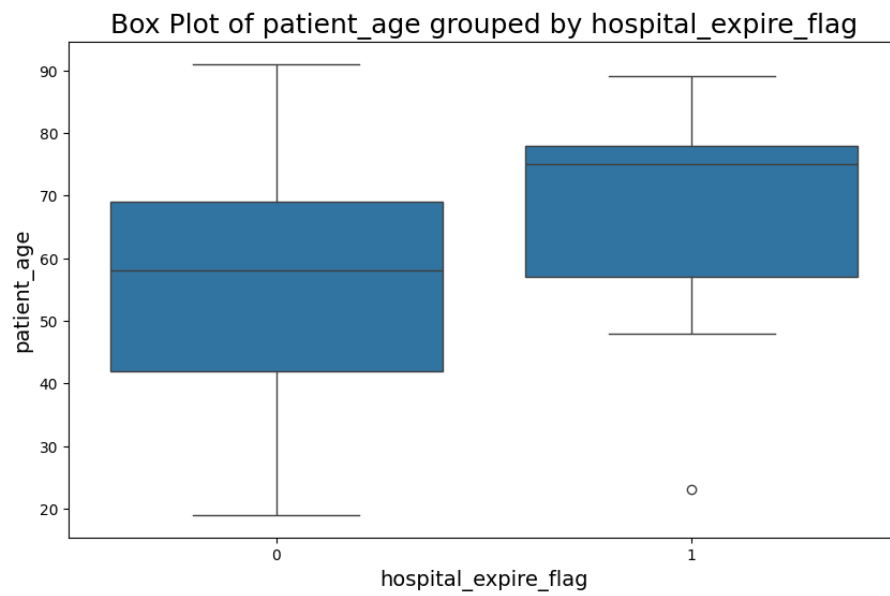
Methods Used:

1. Hilbert-Schmidt Independence Criterion (HSIC)
2. Mean Age Analysis for Groups (Survivors vs. Non-Survivors)

Results:

- HSIC Value: $5.54e-08$ (Extremely weak correlation)
- Mean Age for Survivors: 55.91 years
- Mean Age for Non-Survivors: 67.53 years

The analysis suggests a higher mean age for non-survivors, indicating a potential pattern where older patients have a higher hospital mortality rate.



Conclusions:

The findings imply a noticeable difference in age distribution between survivors and non-survivors. While the HSIC value shows a weak correlation, the difference in mean ages hints at age potentially influencing hospital mortality. Further statistical testing could be conducted for validation.