

# Bias Detection Report

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### 1. Bias Type: Correlation

2. Relevant Features: admission\_type, patient\_marital, patient\_race (for categorical correlation analysis); patient\_age (for numerical risk difference analysis).

### 3. Bias Level:

#### - Correlation Analysis:

- admission\_type: Level 2 (significant bias)

- patient\_marital: Level 5 (extreme bias)

- patient\_race: Level 2 (significant bias)

#### - Risk Difference Analysis:

- Patient Age: Level 1 (no bias)

### 4. Detailed Analysis:

- Using the Chi-Square test, significant biases were detected between patient gender and features such as admission\_type and patient\_race. The patient\_marital status displayed an extreme bias.

- The Risk Difference analysis showed a minimal bias in treatment plan related to patient age above 65, indicating no significant gender-based bias.

### 5. Conclusion:

- The dataset shows varying levels of bias across different features with the most notable being the patient\_marital status. It is advisable to consider these biases in any analysis involving gender-based treatment plans.