# **Bias Detection Report**

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## **Dataset Analyzed**

- \*\*File\*\*: MIMIC-IV.csv

#### **Features Examined**

- \*\*Feature\*\*: patient\_lang

## **Bias Type**

- \*\*Type\*\*: Distribution

### **Tools Used**

- Shannon Entropy and Balance Metric
- Max/Min Ratio
- Normalized Entropy

## **Analysis and Results**

- \*\*Shannon Entropy and Balance Metric\*\*: Approximately 0.486
- \*\*Max/Min Ratio\*\*: Approximately 8.48
- \*\*Normalized Entropy\*\*: Approximately 0.486

#### **Visualizations**

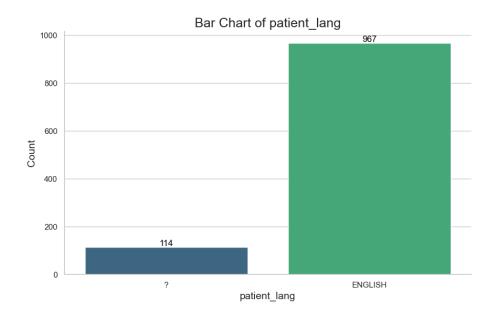
- Bar Chart of Patient Language Distribution
- Pie Chart of Patient Language Distribution

### **Interpretation of Bias Severity**

The distribution of patient languages in this dataset shows a significant bias, with one or more languages predominating. This suggests that the dataset may not be representative of a diverse linguistic population.

#### Recommendations

Consider adjusting the dataset or acquiring additional data to better represent underrepresented languages.



Pie Chart of patient\_lang

