

Healthcare EQUITY

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The Problem area

Healthcare is integral to a functioning and healthy society.

The healthcare industry can be slow to adapt to new and emerging technology.

There are long-standing biases and discrimination that exist in the healthcare industry.





How can Data Science help? the plan?

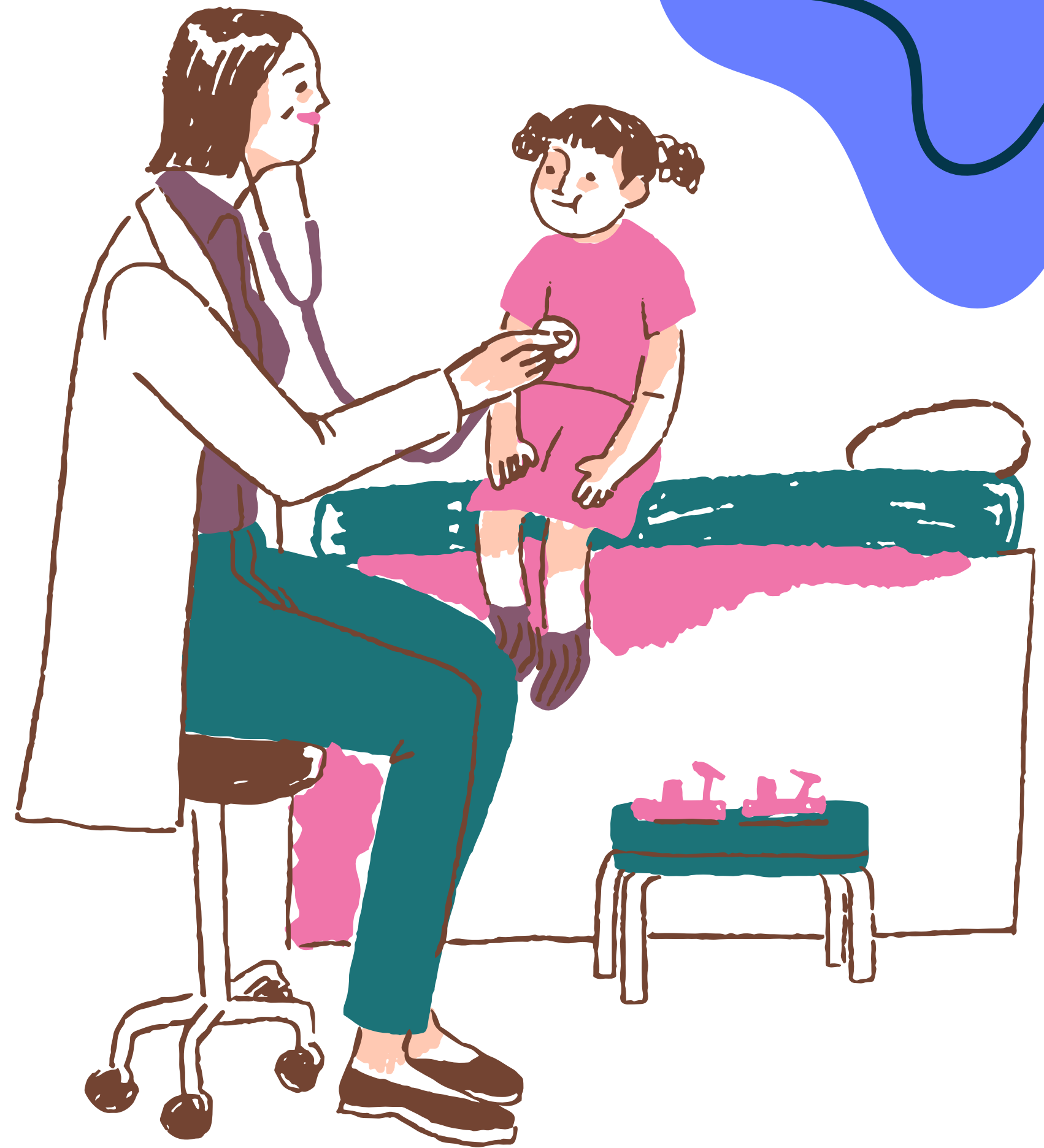
Can Machine Learning aid in the quest for
equitable healthcare?

In this project, we will examine what
discriminatory factors can affect hospital
admission rates so that we can better improve
healthcare outcomes for all patients.

Who would benefit from this?

Everyone! Everyone needs healthcare. It's a vital system that needs to be efficient while being compassionate.

Everyone needs healthcare. Ideally, marginalized communities would benefit the most as they are primarily under-represented and underserved.





What the data?!

Data set:
Hong et al. (2018) released de-identified data on ER admissions from March 2014 to July 2017 from one academic and two community emergency rooms, apart from the Yale New Haven Health System.

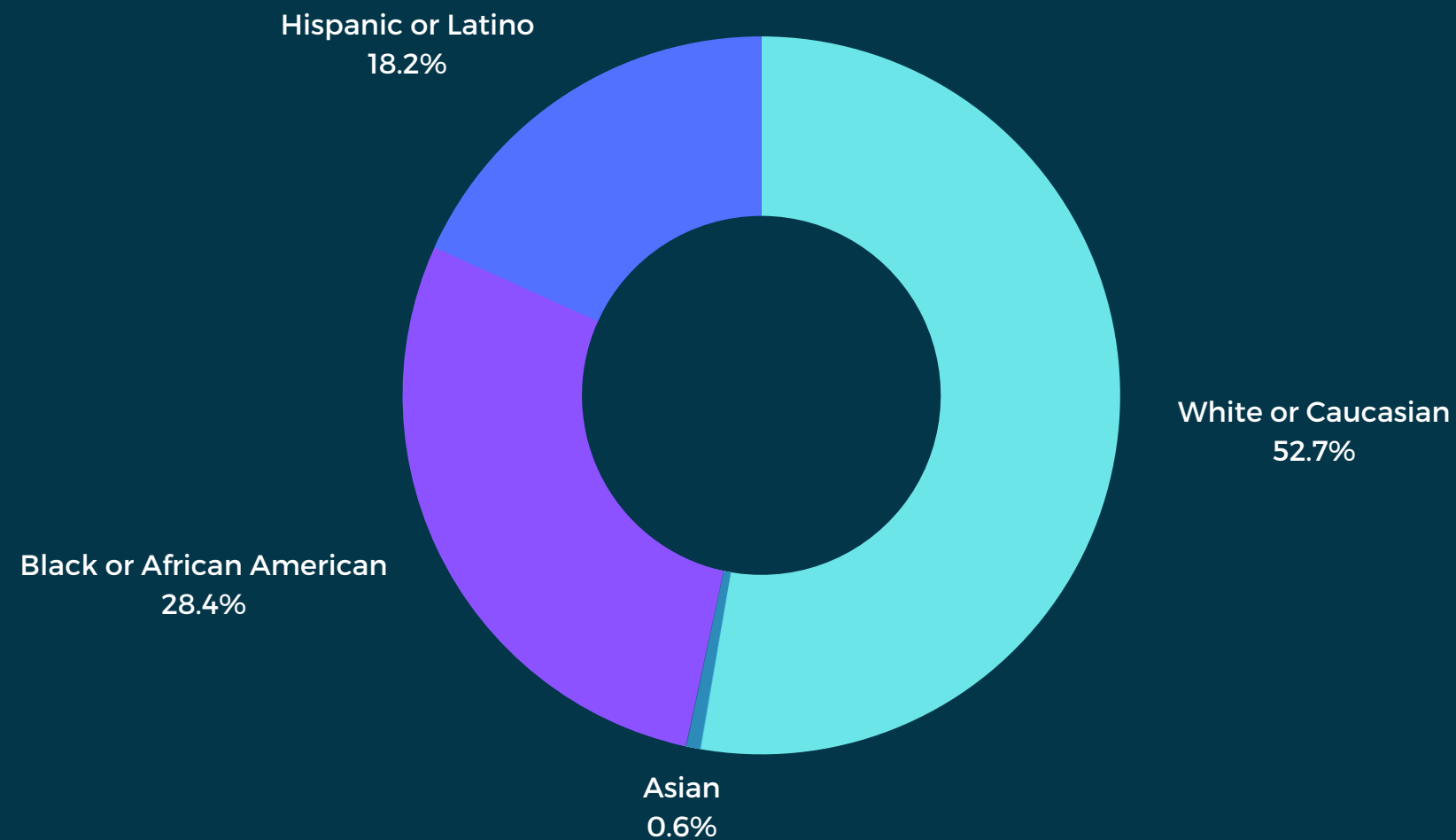
General Info:
After cleaning there are about 480k rows and 509 columns.

Columns fall into these super-categories

- Demographics
- Triage Vitals (Numeric)
- Triage Vitals (Categorical)
- Hospital Usage
- Chief Concerns
- Prior Medical History

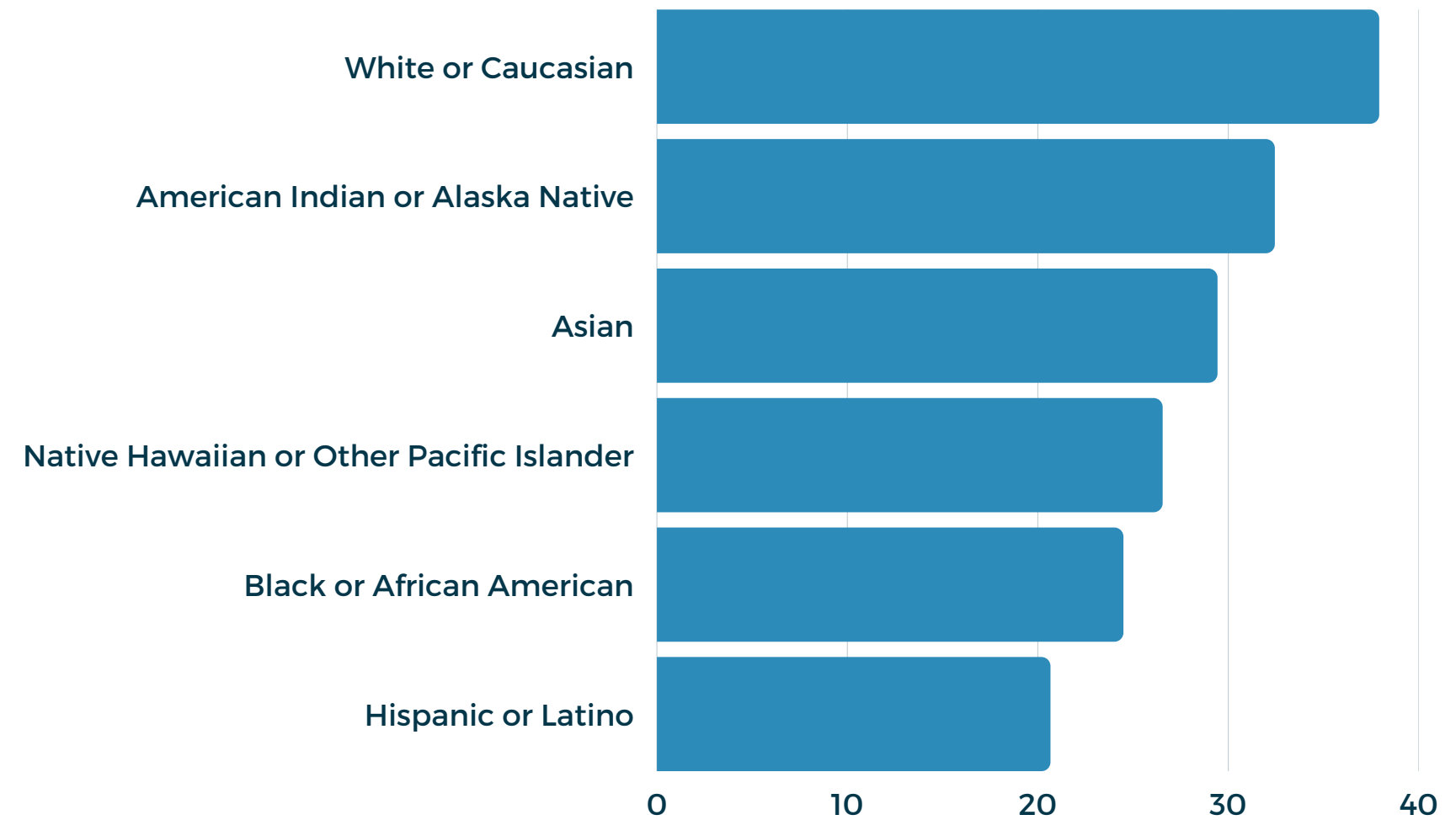
All affecting:
Disposition (admit or discharge)

So is there a problem?



Distribution of Patient Race

Black or African American and Hispanic or Latino patients make up a **large majority of patients**



Admittance (%) by Race

Black or African American and Hispanic or Latino patients get **admitted to the hospital the least**



What's the plan now?

Keep digging! There are more findings to be made!

Now that we have a clean data set, there are endless possibilities of what could be found

We can start with:

Linear Regression
Logistical Regression

Thank you

