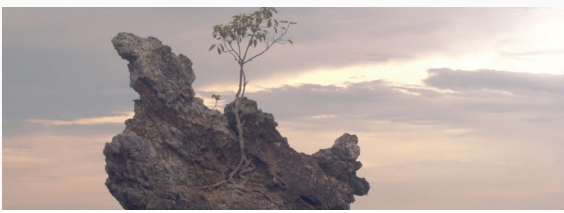## Our Solution

An app which provide

Doctor

- The tool analyses the recommendation from the doctor and gives bias check
- If this doctor got a "bias warning" in which he needs to either gone through a peer-review or an survey

NHS

- Survey - Peer-reviewed &
- Audit / Audit trail
-> Re-invite the patients

- Investigation
- GP-Survey tools

Fighting the subconscious biases that lead to health care disparities
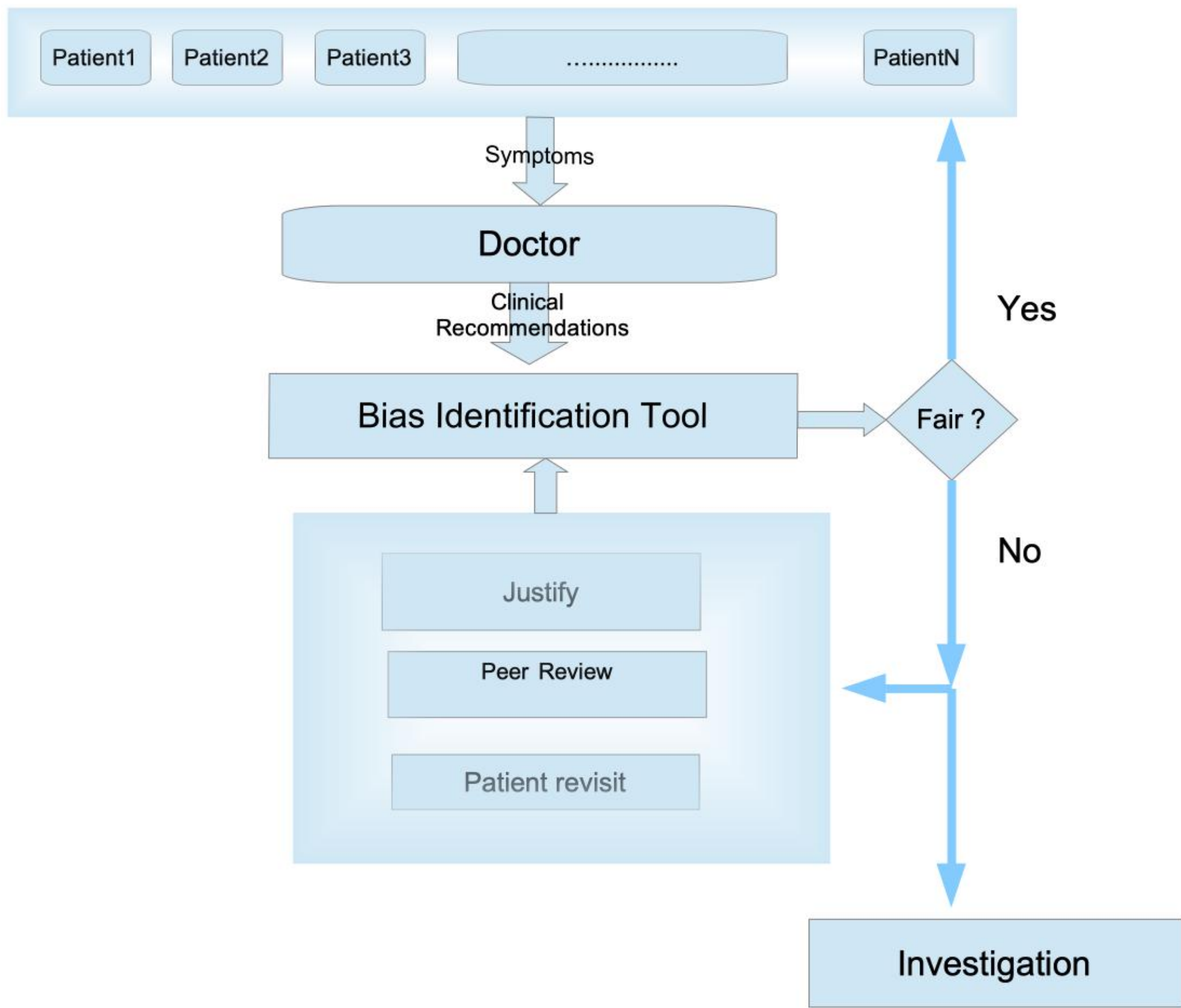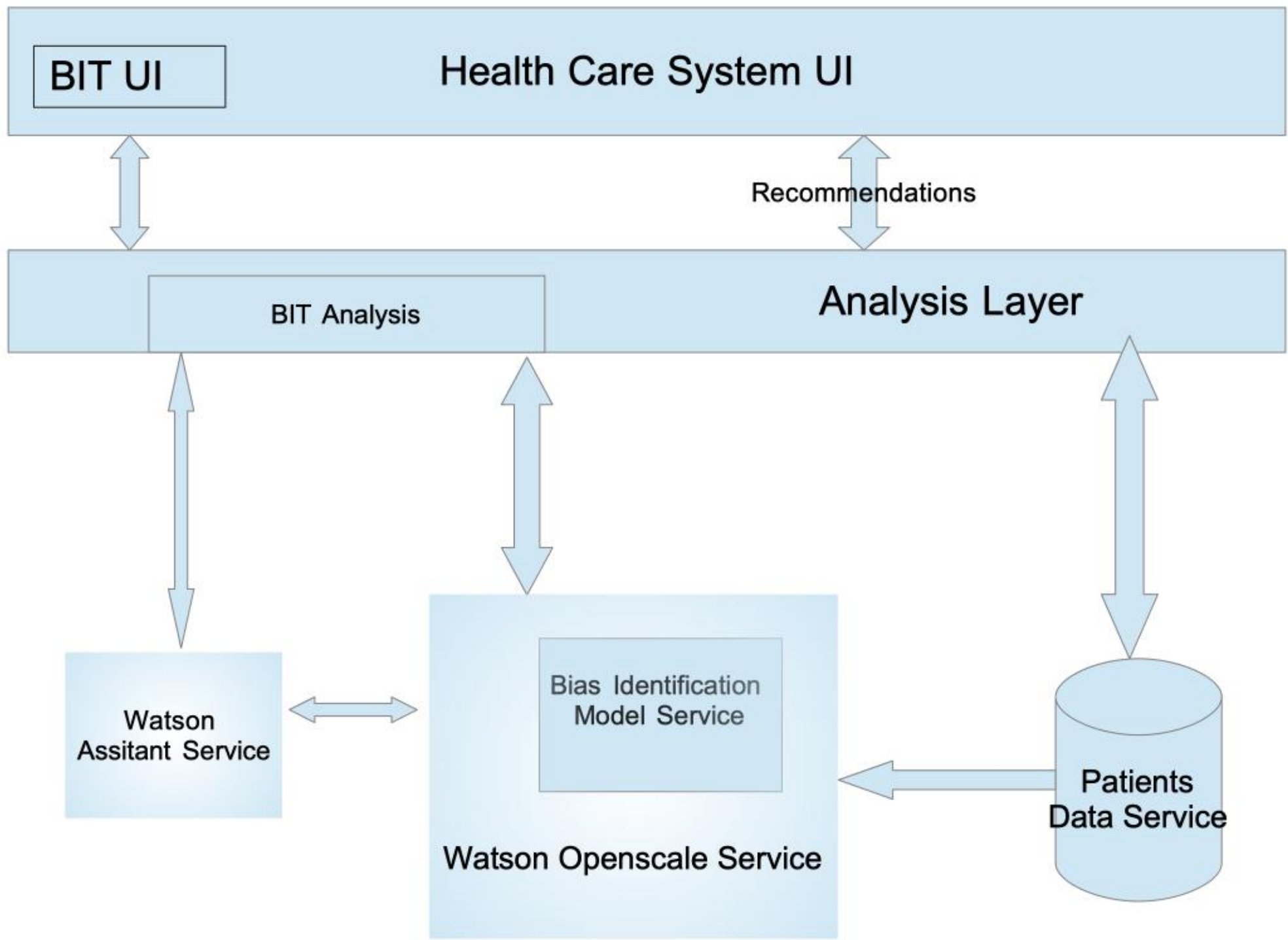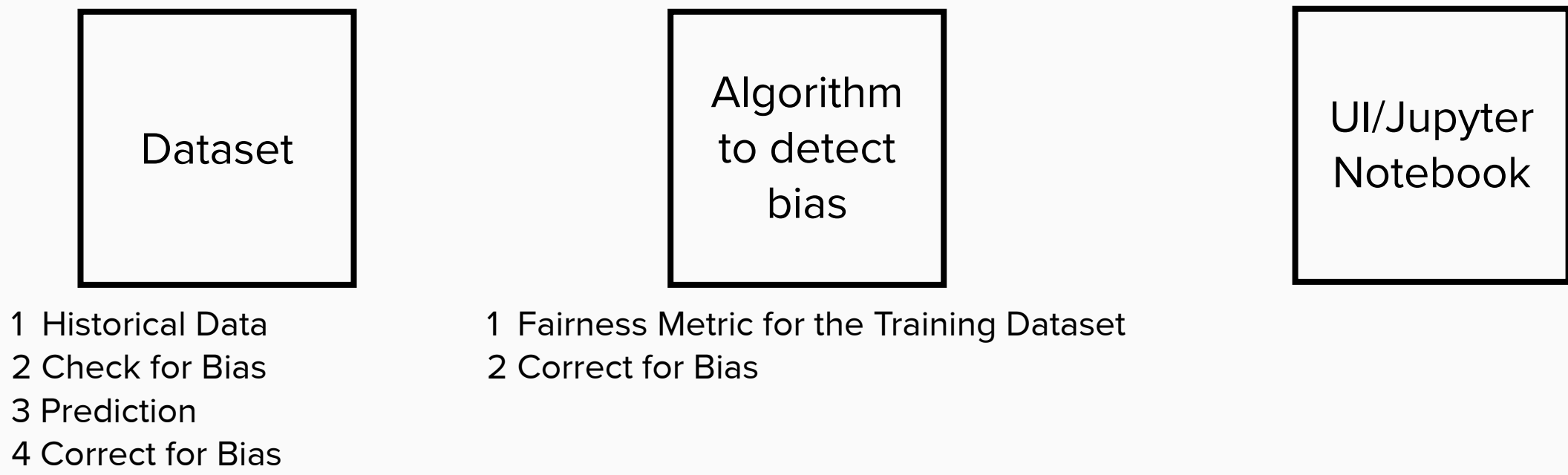
Growing up in rural Alabama at a time of segregated waiting rooms and physicians who refused to touch black patients, Ron Wyatt, MD, MHA, ACP Member, saw health care disparities firsthand. "And frankly, I had never met a black physician," he said. Dr. Wyatt recalled a close family member-a poor ...

Implementation Steps:

Diversity Representation Challenge 3:
4. A doctor can identify their bias and discrepancies in clinical recommendations for Black patients without manual comparison of patients' notes.

Idea: Bias Barometers/ Report on doctor's clinical recommendations:
- Focusing on general practitioners (GP)
- This report will be used by employers ie: NHS , Trust
- Dataset is on heart-disease
- In case of UK and NL, GP is responsible for specific geographic area therefore sorting effect
- Bias includes race, gender , drug addiction history, age, languages/communication , clinical diagnostic period/follow-up (how much time do they spend with this patient), ailments (dataset features)
- Target: doctor recommendation : heart disease
https://webarchive.nationalarchives.gov.uk/20161026161742/http://content.digital.nhs.uk/n3ma

Dataset

1 Historical Data
2 Check for Bias
3 Prediction
4 Correct for Bias

Algorithm to detect bias

1 Fairness Metric for the Training Dataset
2 Correct for Bias

UI/Jupyter Notebook

Bias Identification Tools

The BIT identifies if a clinical recommendation is fair or unfair using the historical clinical records. The historical data is used to find out the difference in mean outcomes between unprivileged and privileged groups. If a new recommendation increase this difference, it is identified as unfair. If it decrease the difference it is a fair recommendation.

Questions

Links to AutoAI and Openscale
Can it be used as an app by patient can to figure out if their doctor recommendation is unbiased.