

## Publication

### Towards a pragmatist dealing with algorithmic bias in medical machine learning

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Machine Learning (ML) is on the rise in medicine, promising improved diagnostic, therapeutic and prognostic clinical tools. While these technological innovations are bound to transform health care, they also bring new ethical concerns to the forefront. One particularly elusive challenge regards discriminatory algorithmic judgements based on biases inherent in the training data. A common line of reasoning distinguishes between justified differential treatments that mirror true disparities between socially salient groups, and unjustified biases which do not, leading to misdiagnosis and erroneous treatment. In the curation of training data this strategy runs into severe problems though, since distinguishing between the two can be next to impossible. We thus plead for a pragmatist dealing with algorithmic bias in healthcare environments. By recurring to a recent reformulation of William James's pragmatist understanding of truth, we recommend that, instead of aiming at a supposedly objective truth, outcome-based therapeutic usefulness should serve as the guiding principle for assessing ML applications in medicine.

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