Race, Medicine, and Garbage Science

In the summer of 2020, as the National Football League was processing tens of thousands of claims from former players who'd suffered brain trauma, some Black players began to suspect that the League was making it harder for them than for their White colleagues to collect compensation.

It turned out, they were right. The NFL's cognitive tests were calibrated to assume that all Black players naturally had lower cognitive abilities than all White players—which, in turn, made it easier for the League to deny Black players' claims. When two Black players sued the NFL, its lawyers argued that this racial double-standard was a “widely accepted and long-established" methodology in science.

In court, this argument failed. And yet, it was an accurate statement about science and medicine in the US.

"Race norming," a practice based largely on a mix of disproven scientific theories and racist tropes, is pervasive in modern medical research and practice. It's taught in medical schools, practiced in major hospitals, and written into insurance policies.

It's also harmful, even potentially deadly, for patients. In 2020, an article in the *New England Journal of Medicine* identified 13 standard algorithms that relied on false racial theories and that could make it more difficult for Black patients to get crucial medical treatments, including:

- having kidney stones removed,
- having a vaginal birth rather than a caesarian section,
- getting treatment for urinary tract infections,
- getting treatment for osteoporosis,
- getting treatment for asthma,
- being screened for breast cancer,
- getting coronary bypass surgery,
- receiving kidney donations.

Recently, several leading medical institutions have begun to tease out race norming from their literature, teaching, and practice. A few insurance companies have agreed to do the same. Some government leaders—most notably, the Biden

administration—have also called for its eradication. But it's an enormous task, as race-norming algorithms are currently used by hundreds of thousands of scientists and practitioners, all across the country. It's also a task that, according to leading AI experts, is becoming more urgent as AI technology works its way into virtually every aspect of the healthcare industry.

According to Leo Anthony Celi, a research scientist at MIT and associate professor of medicine at Harvard Medical School, AI engineers still have only a faint understanding of how even their own algorithms identify race, and how that may be harming patients. "What are the drivers of those [racial] disparities? Is it access to care? Is it from the subjectivity of the care providers? If we don't understand that, we won't have a chance of being able to identify the unintended consequences of the algorithms, and there's no way we'll be able to safeguard the algorithms from perpetuating biases."

EXTRA CREDIT ASSIGNMENT (5 POINTS):

What do you think is the central question for this story and whom would you interview to find out more about it? Write up the following and turn it in on Slack by midnight on Tuesday, 4/16:

1) The central question is (note: there is no one answer to this, you can answer it many ways):

2) Two persons you'd interview to help answer your question (note: I said one in class but I misspoke, sorry, you need to give me two interview subjects here):

3) For each interview subject, write three anchor questions.

4) For each anchor question, write two follow-up questions.