The U.S. health system increasingly uses algorithms to guide clinical decision-making, but a good number of them rely on a specious assumption: that race is somehow an immutable biological characteristic.

Race-based clinical algorithms don’t just fail to “correct” for health determinants that are clinically influential. Their use reinforces racial essentialism and the historical, social, cultural and economic biases that exacerbate health inequity.

Following are highlights from an article published in the AMA Journal of Ethics® (@JournalofEthics) by Madeleine (Maddy) Kane, a medical student at the University of California, Berkeley-University of California, San Francisco Joint Medical Program who is co-founder of the Institute of Healing and Justice in Medicine. The article was co-authored by Rachel Bervell, MD, MS, Angela Y. Zhang, MD, and Jennifer Tsai, MD, MEd.

Using the hypothetical case of a resident working in an obstetrics unit at a county hospital serving predominantly Black and urban Indigenous patients, the article explores the reasons why vaginal birth after cesarean (VBAC) calculators and similar race-based algorithms are sources of iatrogenic harm. Foremost among them: They undermine shared decision-making and the patient’s right to self-determination.

**The narrative goes back centuries**

“While human difference has long been scrutinized, hierarchical racial organization of humans originated from colonial efforts to subjugate people of color,” the authors wrote. “Bolstered by the authority of Western biomedicine, dehumanizing conclusions about racial inferiority were widely adopted in medical scholarship and served as foundations for racial adjustments.”

In addition, much of medical education still relies on the assumption that the typical patient is white, able-bodied, slim and male, the authors noted.

“This logic frames people of color as abnormal human variants, whose manifestations of health and illness require ‘corrections,’” they wrote. “Using tools with race-based corrections can lead to delayed
care, unequal treatment and personal and systemic biases. Fundamentally, it is unscientific and unethical to correct for race in any clinical algorithm.”

Learn more about why race-based medicine is wrong and how physicians should oppose it.

**Time to get real about race**

Correcting for race in a VBAC calculator, for example, can significantly alter risk assessments. It can systematically route members of historically marginalized racial and ethnic groups towards repeat C-sections at higher rates than white patients.

“Race is either falsely assumed to be an immutable biological characteristic or implemented as an overly imprecise proxy for the lived consequences of structural racism,” the authors wrote. “Ultimately, this unscientific rationale places patients of color at disproportionate surgical risk, which is discriminatory and causes iatrogenic harm.”

Read about warnings that algorithms can introduce bias into clinical decisions.

**Ethical ways to respond**

These are among the steps that authors recommended physicians take to quash race-based medicine.

**Acknowledge the harms of race-based medicine.** This includes questioning tools that essentialize racial and ethnic identity.

**Account for racism’s influence in practice guidelines and tools.** For starters, call out racism when you encounter it, and partner with communities affected by it. Also, take note of the markers of risk, such as insurance coverage and incarceration. Then locate and draw on tools that identify structural vulnerability, and be transparent about how and why racial and ethnic data are ever gathered and used.

**Address the diversity of experience.** Especially for oppressed populations, invite patient-centered conversations to help strengthen shared decision-making and patient autonomy.

“We suggest implementing these recommendations in transdisciplinary collaboration within and beyond academic health care settings,” the authors wrote.
Learn why the AMA has declared racism a threat to public health and how the AMA Center for Health Equity works to embed health equity across the organization so that it becomes part of the practice, process, action, innovation, and organizational performance and outcomes.