New study finds closing racial health disparity gap and addressing individual health are not mutually exclusive

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Over the past decade, much of the U.S. health care industry has begun omitting race when predicting and diagnosing disease, thought of as a

way of reducing health disparities and curbing systemic racism in health care.

But should a patient's race be disregarded by health care providers when considering an individual's health risks and treatment options? For instance, diseases such as breast cancer or sickle cell anemia are statistically more likely to occur in specific ethnic and racial populations.

Medical and economic researchers from Northwestern University, the University of Pennsylvania and the University of Wisconsin have co-authored a first-of-its-kind study that formalizes the debate concerning the predictive power of race in medicine. The work, "Using Measures of Race to Make Clinical Predictions: Decision Making, Patient Health and Fairness," is published in *Proceedings of the National Academy of Sciences (PNAS)*.

Seeking to clarify the specific concerns and ultimate goals of clinical care, the new study offers a theoretical foundation for physicians, patients and policymakers as they consider the best approach to predictive models for disease prevention and treatment.

The researchers say it is important for providers to clarify what their goal of care is at the time of the patient's visit. When presented with a patient with an illness, the goal of the physician should be to improve the health outcome of the individual patient, which sometimes might mean considering their race.

"Presuming the role of medicine is to help the patient, doctors and patients alike should both want the best decision made regarding illness and response. If race has predictive power, it should be used," said Charles Manski, the study's senior author.

Manski is the Board of Trustees Professor of Economics at Weinberg

and a faculty fellow at the Institute for Policy Research at Northwestern.

In conducting the study, the researchers used a standard economic perspective on social welfare to solve for a physician's best approach in determining an optimal plan of care for a sick patient.

The researchers then used an extended model that considers how everything that happens before a patient arrives at a doctor's office with an illness affects a physician's approach to treating a particular patient. These precedent conditions may include education, nutrition, socioeconomic background, and so on.

Analysis of both models showed that the clinician's role should always be to provide optimal care for a sick patient. Noting that some diseases are statistically more likely to occur in specific ethnic and racial populations, physicians should want to use all relevant information, including race, to make better clinical predictions to deliver the best care to the patient, Manski said.

"Until genetic information or other robust individual data is readily available, it may be better to use some race information, although less specific, than to leave it out of prediction models. Otherwise, patients of all races will be worse off," Manski said.

"Our study underscores the need for the medical community to think carefully about all the tradeoffs involved in removing considerations of race from clinical decision-making. Otherwise, we risk harming the very groups we are trying to help," said Dr. Atheendar Venkataramani, assistant professor of medical ethics and health policy and a professor of medicine at the University of Pennsylvania.

"One important motivation for writing this paper is what we perceive to be a lack of clarity in much current discourse about clinicians' and

policymakers' objectives and about the meaning of terms like bias, discrimination and fairness as they pertain to health care delivery," said co-author John Mullahy, professor of health economics at the University of Wisconsin-Madison.

More information: Charles F. Manski et al, Using measures of race to make clinical predictions: Decision making, patient health, and fairness, *Proceedings of the National Academy of Sciences* (2023). DOI: 10.1073/pnas.2303370120

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