AMERICAN
PSYCHIATRIC
ASSOCIATION

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October 16, 2020

The Honorable Richard E. Neal
Chairman
House Ways and Means Committee
1102 Longworth House Office Building
Washington, D.C. 20515

The Honorable Kevin Brady
Ranking Member
House Ways and Means Committee
1139 Longworth House Office Building
Washington, DC 20515

Dear Chairman Neal and Ranking Member Brady:

On behalf of the American Psychiatric Association (APA), the national medical specialty association representing over 38,500 psychiatric physicians, I want to thank you for conducting the hearing on May 27 on '*The Disproportionate Impact of COVID-19 on Communities of Color.'* The APA appreciates the Committee's continued work on this critically important matter. We also would like to thank you for the opportunity to provide feedback on the misuse and misapplication of race and ethnicity in clinical algorithms and research, an important issue that impacts the delivery of health care including care for patients with mental illness and substance use disorders. Please find the APA's answers (in italic text) to your request for information questions (in bold text) below.

1.To what extent is it necessary that health and health related organizations address the misuse of race and ethnicity in clinical algorithms and research? What role should patients and communities play?

Clinical algorithms and research are becoming more common in health care since they have the potential to improve care by providing the right care, to the right person at the right time. However, concerns are growing regarding how these algorithms are created and how they are used to determine who receives care. As we leverage the advances in science and medicine, we must be careful and cognizant that we do not inadvertently exacerbate inequities in care, particularly for vulnerable populations. For example, a study by Obermeyer et al.[1] *detected bias in the health cost based algorithm used by Optum, a health services company, to predict and rank which patients would benefit the most from additional care designed to help them adhere to their prescribed medication protocols or out of the hospital. The study looked at more than 6,000 self-identified Blacks and nearly 44,000 self-identified Whites. Although the algorithm excluded race, it used "cost" as a screen for high risk patients. Since cost is not a "race-blind" metric, the algorithm incorrectly concluded that the Black patients must be healthier since they spend less on health care. What was not taken into consideration was that Black patients access health care less, and therefore spend less.*

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[1] Obermeyer, Z., Powers, B., Vogeli, C., & Mullainathan, S. (2019). Dissecting racial bias in an algorithm used to manage the health of populations. Science, 366(6464), 447-453.

Further, a recent article, "Hidden in Plain Sight – Reconsidering the Use of Race Correction in Clinical Algorithms," by Vyas et al.,[2] *aggregated different physician specialty race adjusted algorithms to illustrate where implicit racial bias lies and to demonstrate the dangers of such practices, "given their potential to perpetuate or even amplify race-based health inequities." From cardiology to oncology, the article found that algorithms used to direct care plans or predict outcomes are inherently biased regardless of intention.*

If health and health related organizations support the goal "to create a more healthy, equitable, and inclusive society,"[3] *then it is imperative that they address the misuse of race and ethnicity in clinical algorithms and research. We must ensure that information on race and ethnicity is systematically collected via patient self-report (not inference by a staff member or health care provider). It is also important that health organizations collect data on social determinants of health (e.g. education, job status, housing status, etc.) as opposed to relying solely on race to serve as a proxy.*

In addition, we need to assess our algorithms and consider whether they are truly appropriate. There are many ways in which racial prejudice is baked into clinical algorithms (e.g., eGFR calculations, PFTs, etc.), potentially exacerbating health inequities. When race and ethnicity are used in research, especially when they are the central focus of research (like disparities research), we need to ensure that researchers explicitly explain the context in which these variables are being used and the mechanism through which race and ethnicity are related to the outcome being investigated.

Furthermore, research that focuses on race and ethnicity should ensure that the team of researchers includes those who have disparities expertise and/or lived experience. Health equity should be a focus of the research agenda and be supported as a fundamental organizing principle of research across agencies such as the National Institutes of Health (NIH), Patient Centered Outcomes Research Institute (PCORI), and other research organizations and funders. For example, NIH requires reporting on clinical research enrollment with a limited set of race (and ethnicity) categories, which may need expansion via consultations with patients, communities, others with diversity expertise and lived experience, and also should include social determinants of health factors.

Patients and communities should play a central role in this discussion because "a treatment selection system will likely work best if it is implemented in the context of joint decision-making between the patient and provider, rather than because the 'computer says so.'"[4] *Unequal treatment is not entirely explained by socioeconomic status, insurance coverage, stage or severity of disease, comorbidities, type and availability of health care services, and patient preferences.* <u>*Overall, clinicians and scientists must distinguish between the use of race in descriptive statistics, where it plays a vital role in epidemiologic analyses, and in prescriptive clinical guidelines, where it can exacerbate inequities.*</u>

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[2] Vyas, D. A., Eisenstein, L. G., & Jones, D. S. (2020). Hidden in plain sight—reconsidering the use of race correction in clinical algorithms. The New England Journal of Medicine, 289(9), 874-882.

[3] Dawes, D. E. (2020). The Political Determinants of Health. Johns Hopkins University Press. P.18

[4] DeRubeis, R. J. (2019). The history, current status, and possible future of precision mental health. Behaviour research and therapy, 123, 103506.

It is important that clinical trials, particularly large Phase III clinical trials, have diverse racial and ethnic composition so that we can come to understand the efficacy and safety of treatments across diverse populations. Similarly, it is important to develop biomarkers in diverse populations and understand the limits of applicability of these biomarkers to particular populations. Institutions and funding agencies should incentivize or require investigators to include patients and communities in the early phases of development of research projects to ensure that the research questions are meaningful to diverse communities frequently underrepresented in mental health research. In addition, it should be apparent that recruitment and other study procedures are likely to be acceptable to diverse study participants. Increasing the diversity of and methods for data collection will require participation and collaboration of the federal government, state governments, health plan and insurers, providers, purchasers, and consumers.

2. What have been the most effective strategies that you or your organization have used to correct the misuse of race and ethnicity in clinical algorithms and research, if any? What have been the challenges and barriers to advancing those strategies?

The APA through its Division of Diversity and Health Equity and Division of Education has produced Continuing Medical Education modules (e.g., Cultural Formulation Interview, toolkits (e.g., Stress & Trauma Toolkit for Treating Indigenous People in a Changing Political and Social Environment), fact sheets (e.g., Mental Health Disparities: Diverse Populations) and other educational content specifically for use in treating diverse and vulnerable populations. These educational resources can enable our members to be culturally competent psychiatrists as they serve the needs of evolving, diverse, underrepresented and underserved patient populations in order to end disparities in mental health care.

Several studies involving our APA members have emerged in the context of the COVID-19 pandemic that focus on race and ethnicity. In one positive example, an APA member's institution created a diverse team of researchers that included: 1) those affected by COVID-19 (e.g. front-line providers who cared for patients with COVID-19); 2) those with expertise on disparities; and 3) those with lived experience. This approach was successful in producing a substantial modification to a paper, that initially did not benefit from such diverse characteristics among the authors, adding diversity of perspective ultimately resulted in a substantially different interpretation and discussion of findings.[5,6] *In order to alleviate implicit bias, this type of approach should be more widespread.*

Another APA member was involved with the examination of the impact of race on treatment in two settings, an adolescent inpatient psychiatry unit and a consultation-liaison service. In both cases, the more deeply the team examined the issues, the more complicated the inference and the intervention. Below is a summary of the examination of the "case studies" from this study which are being prepared for publication.

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[5] Golestaneh, Ladan et. al. *The Association of Race and COVID-19 mortality.* EClinicalMedicine. 2020 Aug;25: 100455. doi: 10.1016/j.eclinm.2020.100455. Epub 2020 Jul 15.

[6] Linas, Benjamin P. and Cunningham, Chinazo O. *COVID-19 Disparities: A Call for Equity in Health Outcomes and Clinical Research*. Clinical Infectious Diseases. https://doi.org/10.1093/cid/ciaa1460. Published: 29 September 2020.

- *<u>Differential restraint use by race:</u> There is limited literature that suggests racial biases related to the application of physical restraints.[7] The adolescent psychiatry unit explored whether there was a different rate of the application of physical restraints by race. Most of the units have very low rates of restraint use. This unit has a slightly higher rate of restraint use because it uses brief periods of restraint to handle aggressive, often autism spectrum disorder (ASD), adolescents. Researchers found that there was a higher rate of restraint use for African American patients than Caucasian patients. However, the rate of assaults by patients on staff was higher among African American patients than Caucasian patients. Accounting for the differential rate of assault eliminated the apparent difference in restraint use by race. Therefore, the question to answer was, "Why did African American patients assault staff more than Caucasian patients?" For example, are staff developing closer or more supportive relationships with the Caucasian than African American patients? Are staff de-escalating aggression more effectively in Caucasian than African American patients?*

- *<u>Differential prescription of antipsychotics by race</u>: There is limited and somewhat unclear literature suggesting that African American patients with psychosis are more likely to receive adjunctive medications and less likely to receive newer antipsychotics than Caucasian patients.[8,9] At the institution's Consultation-Liaison Program, they studied the relative rate of antipsychotic and antidepressant prescription by race. Researchers found that for African Americans, the rate of antipsychotic prescription was higher and the rate of antidepressant prescription was lower than for Caucasians. However, they also found the rate of psychotic disorders was higher and the rate of mood disorders was lower in the African Americans relative to the Caucasians. Adjusting for the diagnostic difference eliminated the impact of race on prescribing pattern.*

The complex question to answer in the aforementioned case study is: "is there a racial bias in how clinicians are making psychiatric diagnoses?" This is an enormously challenging question to answer in clinical settings. One would need to have a "gold standard," a diagnosis made by a trained reliable and culturally competent rater using a structured diagnostic interview, against which to compare the clinical diagnoses made by clinicians.

It is likely that there are multiple ways that race is influencing mental health care. The case study highlights the challenges we face in understanding the potential misuse of race and ethnicity in clinical algorithms and research, and the challenges to correct them. In this case study, our member concluded that these effects are probably not gross misapplication of psychopharmacology or misuse of restraints. The outstanding question our member identified, is whether there could be ways that race might subtly influence interactions with clinical staff. This

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[7] Schnitzer K, Merideth F, Macias-Konstantopoulos W, Hayden D, Shtasel D, Bird S. *Disparities in Care: The Role of Race on the Utilization of Physical Restraints in the Emergency Setting.* Acad Emerg Med. 2020 Jul 20. doi: 10.1111/acem.14092. Epub ahead of print. PMID: 32691509.

[8] Puyat JH, Daw JR, Cunningham CM, Law MR, Wong ST, Greyson DL, Morgan SG. Racial and ethnic disparities in the use of antipsychotic medication: a systematic review and meta-analysis. Soc Psychiatry Psychiatr Epidemiol. 2013 Dec;48(12):1861-72. doi: 10.1007/s00127-013-0753-4. Epub 2013 Aug 14. PMID: 23942793.

[9] Mallinger JB, Lamberti SJ. Racial differences in the use of adjunctive psychotropic medications for patients with schizophrenia. J Ment Health Policy Econ. 2007 Mar;10(1):15-22. PMID: 17417044.

in turn likely influences the clinical impressions of patients developed by staff and undermines the staff's ability to provide appropriate care.

The challenges and barriers to advancing strategies pertaining to racial equity concerns in clinical algorithms and related health outcomes are rooted in our "history of political and legal precedent that have baked into our systems the discriminatory standards, practices, and beliefs we observe or experience today."[10] When we address the political determinants of health, we can then dismantle the social determinants of health and in turn improve mental health disparities.

3. What strategies would you propose to build consensus and widely used guidelines that could be adopted broadly across the clinical and research community to end the misuse of race and ethnicity in clinical algorithms and research?

The foundation for a strategy to build consensus and widely used guidelines that could be adopted broadly across the clinical and research community to end the misuse of race and ethnicity in clinical algorithms and research is to learn, process and understand how they relate to the history of race and racism in our country. Currently, "many of these race-adjusted algorithms guide decisions in ways that direct more attention or resources to white patients than to members of racial and ethnic minorities,"[11] which can lead to minorities being systematically misdiagnosed and undertreated. When developing or applying clinical algorithms with race as a factor, Kaplan & Bennet[12] noted that physicians should ask three questions:

1) Is the need for race correction based on robust evidence and statistical analyses (e.g., with consideration of internal and external validity, potential confounders, and bias)?
2) Is there a plausible causal mechanism for the racial difference that justifies the race correction?
3) Would implementing this race correction relieve or exacerbate health inequities?

It is critical to provide research opportunities for those who are most affected by racism. This should happen at the funding level, the medical school or health system level, and the research team level. We recommend establishing incentives to encourage this to happen within organizations. These types of strategies are described in the attached Linas & Cunningham[13] commentary. Also, more support is needed at all levels for research on health disparities, social determinants of health and health equity. The analysis that NIH recently conducted looking at funding disparities at NIH's research project R01 is an example of current funding gaps.[14]

We also recommend a strategy that includes the input of patients on race/ethnicity and social determinants of health factors. As mentioned previously, NIH requires reporting on clinical research enrollment with a limited set of race and ethnicity categories, which ***we recommend be***

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[10] Dawes, D. E. (2020). The Political Determinants of Health. Johns Hopkins University Press. P.19

[11] Vyas, D. A., Eisenstein, L. G., & Jones, D. S. (2020). Hidden in plain sight—reconsidering the use of race correction in clinical algorithms. The New England Journal of Medicine, 289(9), 874-882.

[12] Kaplan, J. B., & Bennett, T. (2003). Use of race and ethnicity in biomedical publication. JAMA, 289(20), 2709-2716.

[13] Linas, Benjamin P. and Cunningham, Chinazo O. *COVID-19 Disparities: A Call for Equity in Health Outcomes and Clinical Research*. Clinical Infectious Diseases. https://doi.org/10.1093/cid/ciaa1460. Published: 29 September 2020.

[14] National Institutes of Health. (9 Oct. 2019). *Research topic contributes to persistent gap in NIH research grants to black scientists*. Available: https://www.nih.gov/news-events/news-releases/research-topic-contributes-persistent-gap-nih-research-grants-black-scientists

expanded to include consultations with patients and communities. *In addition, NIH should work towards inclusion of social determinants of health factors. The list of factors should be informed by patients, communities, and others with diversity expertise and lived experience.*

APA further recommends **that funders and institutions/organizations conducting clinical research partner with researchers and leaders in surrounding communities***, like PCORI's focus on patient-centeredness and the use of consumer advisory boards. An example of a partnership with leaders in their surrounding communities to enhance the diversity of participants in clinical research includes Yale's Cultural Ambassadors Program.*[15] *This program has been extremely successful in dramatically increasing the representation of Black and Indigenous People of Color (BIPOC) in large numbers of clinical trials. The Cultural Ambassadors program was developed by the Yale Center for Clinical Investigation (the Yale CTSA). This model has been adopted by other universities (e.g. Duke) and led to partnerships with the U.S. Food and Drug Administration (FDA) and Pfizer on strategies to enhance the diversity of clinical trials recruitment.*

Finally, ignoring racial bias, bigotry, and maltreatment of BIPOCs in favor of a homogenized view of race, if continued, will compound the flaws of clinical algorithms and research that could otherwise benefit the health of racial and ethnic minorities. Today, "many of these race-adjusted algorithms guide decisions in ways that direct more attention or resources to white patients than to members of racial and ethnic minorities,"[16] *which can lead to racial and ethnic minorities being systematically misdiagnosed and untreated.*

Shining a light on disparities as well as understanding their impact, as your Committee is attempting to do, can contribute to building the kind of consensus that ultimately diminishes bias in clinical algorithms and research. We thank you for the opportunity to submit these comments for consideration, and for your leadership and focus on the issue of racial bias in medicine. Please let us know how we can assist in your efforts to alleviate racial bias and misuse of racial data in heath research. If you have any questions, please contact Michelle Greenhalgh at mgreenhalgh@psych.org / 202.459.9708.

Sincerely,

Saul Levin MD, MPA

Saul Levin, MD, MPA, FRCP-E, FRCPsych
CEO and Medical Director

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[15] Yale Center for Clinical Investigation. *Yale Cultural Ambassadors: A Unique Community Partnership.* Available: https://medicine.yale.edu/ycci/events/summit/2018summit/speakers/ambassadors/.

[16] Vyas, D. A., Eisenstein, L. G., & Jones, D. S. (2020). Hidden in plain sight—reconsidering the use of race correction in clinical algorithms. The New England Journal of Medicine, 289(9), 874-882.

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2. Dawes, D. E. (2020). *The Political Determinants of Health*. Johns Hopkins University Press.
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3. Linas, Benjamin P. and Cunningham, Chinazo O. *COVID-19 Disparities: A Call for Equity in Health Outcomes and Clinical Research*. Clinical Infectious Diseases. https://doi.org/10.1093/cid/ciaa1460. Published: 29 September 2020.
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