# AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

Resolution:502 (A-24)

Introduced by: Medical Student Section

Subject: Tribally-Directed Precision Medicine Research

Referred to: Reference Committee E

Whereas, an estimated 80% of data used in precision medicine is from people with European ancestry, limiting generalizability of research and possibly exacerbating health inequities 1-6; and

Whereas, effects of ongoing cultural genocide and colonization increase chronic disease burden and reduce quality of care for American Indian and Alaska Native (AI/AN) persons<sup>3,7–11</sup>; and

Whereas, a 2021 study found that Al/AN persons are underrepresented at only 0.3% of research participants while comprising 3% of the US population, while non-Hispanic whites were overrepresented at 82% while comprising 59% of the US population<sup>2,4,6,9,12</sup>; and

Whereas, a National Institutes of Health (NIH) report on Al/AN engagement in the All of Us Research Program noted a need for comanagement of precision medicine research with Al/AN communities and consideration of the distinct ethical, legal, and social contexts when engaging Al/AN communities in research, including their status as political entities<sup>13–16</sup>; and

Whereas, Al/AN researchers have developed specific models to recruit Al/AN persons for clinical trials that account for the complex geopolitical climates of sovereign governments that extend far beyond considerations of race and ethnicity, such as the principles for engaging in ethical research with Indigenous people by Claw et al. and the Circle of Trust<sup>9,14,17–19</sup>; and

Whereas, the Indian Health Service does not have the resources or facilities to support precision medicine research without institutional partnerships<sup>20</sup>; and

Whereas, a 2022 White House Office of Science and Technology Policy memorandum recognized the value of Indigenous knowledge in scientific advances and created a working group to include Indigenous perspectives in federal decisions and grantmaking<sup>21</sup>; therefore be it

RESOLVED, that our American Medical Association support clinical funding supplements to the National Institutes of Health, the U.S. Food and Drug Administration, and the Indian Health Service to promote greater participation of the Indian Health Service, Tribal, and Urban Indian Health Programs in clinical research.

Fiscal Note: Minimal - less than \$1,000

Received: 4/5/2024

2 3 4

Resolution:502 (A-24) Page 2 of 3

#### **REFERENCES**

- Overview of Precision Medicine US. Accessed August 27, 2023. https://www.thermofisher.com/us/en/home/clinical/precision-medicine/precision-medicine-learning-center/precision-medicine-resource-library/precision-medicine-articles/overview-precision-medicine.html
- 2. Lee SSJ, Fullerton SM, McMahon CE, et al. Targeting Representation: Interpreting Calls for Diversity in Precision Medicine Research. *Yale J Biol Med.* 2022;95(3):317-326.
- 3. Vigil D, Sinaii N, Karp B. American Indian and Alaska Native Enrollment in Clinical Studies in the National Institutes of Health's Intramural Research Program. *Ethics Hum Res.* 2021;43(3):2-9. doi:10.1002/eahr.500090
- 4. Aldrighetti CM, Niemierko A, Van Allen E, Willers H, Kamran SC. Racial and Ethnic Disparities Among Participants in Precision Oncology Clinical Studies. *JAMA Netw Open*. 2021;4(11):e2133205. doi:10.1001/jamanetworkopen.2021.33205
- Commissioner O of the. Collection of Race and Ethnicity Data in Clinical Trials. Published August 10, 2023. Accessed August 27, 2023. https://www.fda.gov/regulatory-information/search-fda-guidance-documents/collection-race-and-ethnicity-dataclinical-trials
- Khoury MJ, Bowen S, Dotson WD, et al. Health equity in the implementation of genomics and precision medicine: A public health imperative. Genet Med Off J Am Coll Med Genet. 2022;24(8):1630-1639. doi:10.1016/j.gim.2022.04.009
- 7. Farrell J, Burow PB, McConnell K, Bayham J, Whyte K, Koss G. Effects of land dispossession and forced migration on Indigenous peoples in North America. *Science*. 2021;374(6567):eabe4943. doi:10.1126/science.abe4943
- Adakai M. Health Disparities Among American Indians/Alaska Natives Arizona, 2017. MMWR Morb Mortal Wkly Rep. 2018;67. doi:10.15585/mmwr.mm6747a4
- Skewes MC, Gonzalez VM, Gameon JA, et al. Health Disparities Research with American Indian Communities: The Importance of Trust and Transparency. Am J Community Psychol. Published online July 11, 2020:10.1002/ajcp.12445. doi:10.1002/ajcp.12445
- 10. Solomon TGA, Starks RRB, Attakai A, et al. The Generational Impact Of Racism On Health: Voices From American Indian Communities. *Health Aff (Millwood)*. 2022;41(2):281-288. doi:10.1377/hlthaff.2021.01419
- 11. Trinidad SB, Blacksher E, Woodbury RB, et al. Precision medicine research with American Indian and Alaska Native communities: Results of a deliberative engagement with tribal leaders. *Genet Med Off J Am Coll Med Genet*. 2022;24(3):622-630. doi:10.1016/j.gim.2021.11.003
- U.S. Census Bureau QuickFacts: United States. Accessed August 27, 2023. https://www.census.gov/guickfacts/fact/table/US/PST045222
- 13. Bentley AR, Callier Š, Rotimi CN. Diversity and inclusion in genomic research: why the uneven progress? *J Community Genet*. 2017;8(4):255-266. doi:10.1007/s12687-017-0316-6
- Mainous AG, Kelliher A, Warne D. Recruiting Indigenous Patients Into Clinical Trials: A Circle of Trust. Ann Fam Med. 2023;21(1):54-56. doi:10.1370/afm.2901
- 15. All of Us Tribal Engagement. All of Us Research Program | NIH. Published September 14, 2020. Accessed August 27, 2023. https://allofus.nih.gov/about/diversity-and-inclusion/tribal-engagement
- 16. All of Us Research Program Tribal Consultation Final Report. All of Us Research Program | NIH. Published March 16, 2021. Accessed August 27, 2023. https://allofus.nih.gov/all-us-research-program-tribal-consultation-final-report
- 17. Claw KG, Anderson MZ, Begay RL, Tsosie KS, Fox K, Garrison NA. A framework for enhancing ethical genomic research with Indigenous communities. *Nat Commun.* 2018;9:2957. doi:10.1038/s41467-018-05188-3
- 18. H-460.884 Indigenous Data Sovereignty | AMA. Accessed August 27, 2023. https://policysearch.ama-assn.org/policyfinder/detail/%22Indigenous%20Data%20Sovereignty%20H-460.884%22?uri=%2FAMADoc%2FHOD.xml-H-460.884.xml
- 19. Pacheco CM, Daley SM, Brown T, Filippi M, Greiner KA, Daley CM. Moving Forward: Breaking the Cycle of Mistrust Between American Indians and Researchers. *Am J Public Health*. 2013;103(12):2152-2159. doi:10.2105/AJPH.2013.301480
- Requirements: Priorities of Care | Eligibility. Purchased/Referred Care (PRC). Accessed August 27, 2023. https://www.ihs.gov/prc/eligibility/requirements-priorities-of-care/
- 21. OSTP-CEQ-IK-Guidance.pdf. Accessed August 27, 2023. https://www.whitehouse.gov/wp-content/uploads/2022/12/OSTP-CEQ-IK-Guidance.pdf
- Disparities | Fact Sheets. Newsroom. Published January 1, 2013. Accessed August 27, 2023. https://www.ihs.gov/newsroom/factsheets/disparities

# **RELEVANT AMA Policy**

# H-460.884 Indigenous Data Sovereignty

Our AMA: (1) recognizes that American Indian and Alaska Native (Al/AN) Tribes and Villages are sovereign governments that should be consulted before the conduct of research specific to their members, lands, and properties; (2) supports that Al/AN Tribes and Villages' Institutional Review Boards (IRBs) and research departments retain the right to oversee and regulate the collection, ownership, and management of research data with the consent of their members, and that individual members of Al/AN Tribes and Villages retain their autonomy and privacy regarding research data shared with researchers, Al/AN Tribes and Villages, and governments, consistent with existing protections under 45 CFR 46; and (3) encourages: (a) the use and regular review of data-sharing agreements for all studies between academic medical centers and Al/AN Tribes and Villages be mutually agreed upon and aligned with Al/AN Tribes' and Villages' preferences, and (b) the National Institutes of Health and other stakeholders to provide flexible funding to Al/AN Tribes and Villages for research efforts, including the creation and maintenance of IRBs. [Res. 003, I-22]

Resolution:502 (A-24) Page 3 of 3

# H-460.911 Increasing Minority, Female, and other Underrepresented Group Participation in Clinical Research

1. Our AMA advocates that: a. The Food and Drug Administration (FDA) and National Institutes of Health (NIH) conduct annual surveillance of clinical trials by gender, race, and ethnicity, including consideration of pediatric and elderly populations, to determine if proportionate representation of women and minorities is maintained in terms of enrollment and retention. This surveillance effort should be modeled after National Institute of Health guidelines on the inclusion of women and minority populations. b. The FDA have a page on its web site that details the prevalence of minorities and women in its clinical trials and its efforts to increase their enrollment and participation in this research; and c. Resources be provided to community level agencies that work with those minorities, females, and other underrepresented groups who are not proportionately represented in clinical trials to address issues of lack of access, distrust, and lack of patient awareness of the benefits of trials in their health care. These minorities include Black Individuals/African Americans, Hispanics, Asians/Pacific Islanders/Native Hawaiians, and Native Americans. 2. Our AMA recommends the following activities to the FDA in order to ensure proportionate representation of minorities, females, and other underrepresented groups in clinical trials: a. Increased fiscal support for community outreach programs; e.g., culturally relevant community education, community leaders' support, and listening to community's needs; b. Increased outreach to all physicians to encourage recruitment of patients from underrepresented groups in clinical trials; c. Continued education for all physicians and physicians-in-training on clinical trials, subject recruitment, subject safety, and possible expense reimbursements, and that this education encompass discussion of barriers that currently constrain appropriate recruitment of underrepresented groups and methods for increasing trial accessibility for patients; d. Support for the involvement of minority physicians in the development of partnerships between minority communities and research institutions; and e. Fiscal support for minority, female, and other underrepresented groups recruitment efforts and increasing trial accessibility. 3. Our AMA advocates that specific results of outcomes in all clinical trials, both pre- and post-FDA approval, are to be determined for all subgroups of gender, race and ethnicity, including consideration of pediatric and elderly populations; and that these results are included in publication and/or freely distributed, whether or not subgroup differences exist. [BOT Rep. 4, A-08; Reaffirmed: CSAPH Rep. 01, A-18; Modified: Res. 016, I-221

# D-460.976 Genomic and Molecular-based Personalized Health Care

Our AMA will: (1) continue to recognize the need for possible adaptation of the US health care system to prospectively prevent the development of disease by ethically using genomics, proteomics, metabolomics, imaging and other advanced diagnostics, along with standardized informatics tools to develop individual risk assessments and personal health plans; (2) support studies aimed at determining the viability of prospective care models and measures that will assist in creating a stronger focus on prospective care in the US health care system; (3) support research and discussion regarding the multidimensional ethical issues related to prospective care models, such as genetic testing; (4) maintain a visible presence in genetics and molecular medicine, including web-based resources and the development of educational materials, to assist in educating physicians about relevant clinical practice issues related to genomics as they develop; and (5) promote the appropriate use of pharmacogenomics in drug development and clinical trials. [CSAPH Rep. 4, A-06; Reaffirmed: CSAPH Rep. 4, A-10; Reaffirmed: CSAPH Rep. 01, A-20]