

Clear communication of race and ethnicity for public health: best practices & common failings

September 23rd, 2021 12-4pm EST

RESOURCE PACKET

Table of Contents

1. The Team + Citing Our Work	3
1a. Meet the Team	3
1b. How to Cite	4
2. Summary of Workshop Information	5
Conceptualization (Definition)	5
Operationalization (Measurement)	
Operationalization (Coding)	
Peer Review	8
3. Workshop Activities	9
4. Resources for Clear Communication	
4a. Capitalization Practices	13
4b. Current Guidelines: Journals & Institutions	
4c. Key Readings	17
5. References	
5a. Sections 1-4	22
5b. Slide Decks	22

1. The Team + Citing Our Work

1a. Meet the Team

We are a collaborative team of a PhD students from epidemiology, sociology, anthropology and health policy who trained together at the Carolina Population Center, an interdisciplinary research center associated with the University of North Caroline at Chapel Hill. While engaged in interdisciplinary research discussions, we noted a distinct lack of consensus both between and within our disciplines on the use of race and ethnicity in publications.

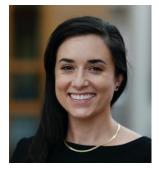
In 2019, motivated by Dr. Thomas LaVeist's 1996 article "Why we should continue to study race... but do a better job: an essay on race, racism, and health" (Ethn Dis), we started a project examining the conceptualization, operationalization, and use of race in academic publications. Using a clear set of defined inclusion/exclusion criteria and a simple stratified random sample of articles, we extracted and analyzed how race and ethnicity was defined, measured, coded, used within a discipline's literature over time. We focused on trends in three disciplines – medicine, epidemiology, and medical sociology – sampling articles from high impact factor field-specific journals.

We found that while the proportion of articles that included data on participants' race and ethnicity increased over time for each discipline reviewed (epidemiology, medicine, and medical sociology), the majority failed to report how race and ethnicity were measured. Further, exceptionally few (~1/240) studies conceptualized (i.e., defined) race and ethnicity. Manuscripts from this project are currently under review. As publications influence both the research practices of current scientists and shape future researchers, we feel that it is important to (1) have a clear understanding of the trajectory of the use of race and ethnicity in research and (2) highlight opportunities for improvement in scientific communication.

Beyond disciplinary divides, our group is diverse along many axes of identity and being, including but not limited to racial and ethnic. Within our group, we identify as Black, Indigenous, White, immigrant, Latina, Muslim, South Asian, and multiracial.

Follow our work here: https://www.biosocialteam.com

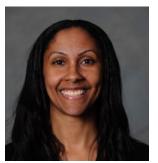
Questions or comments? Contact the team here: biosocial.collab@gmail.com



Rae Anne M. Martinez, MSPH. Rae Anne is an Epidemiology PhD student at the University of North Carolina - Chapel Hill. Martinez is broadly interested in how psychosocial stressors are embodied through epigenetic modification and subsequent impacts on health across the life course. She is also interested in exploring historical & contemporary conceptualizations of race and ethnicity in health scholarship and their relationship of these social constructs to health. Martinez was a Flinn Foundation Scholar at the University of Arizona, where she received her B.S. in Molecular & Cellular Biology and a B.A. in Sociology in 2014. She received her MSPH from UNC Chapel Hill in 2019. Google Scholar.



Nafeesa Andrabi, MA. Nafeesa Andrabi is a fifth-year Sociology PhD student at the University of North Carolina - Chapel Hill, a Biosocial trainee at the Carolina Population Center and a National Science Foundation Graduate Research Fellow. Her research centers on understandings of race among Muslims in the United States and the mental and physical health consequences of Muslim racialization in the US context. Google Scholar.



Andrea "Andi" Goodwin, MA, MS. Andi Goodwin is a fifth-year graduate student in University of North Carolina – Chapel Hill's Sociology doctoral program, and a predoctoral trainee in the Carolina Population Center's biosocial training program. Her general research interests include social stratification's association with health disparities and caregiving burden in the US context. ORCiD.



Rachel E. Wilbur, MPH. Rachel Wilbur is a sixth-year doctoral candidate in the department of Anthropology at the University of North Carolina – Chapel Hill, where she previously completed an MPH in Health Behavior and Health Education. Her research explores the effects of social determinants of health, historical, and intergenerational trauma and resilience on contemporary health among Native American and Alaska Native populations. Research Gate.



Natalie R. Smith, MS, PhD. Natalie Smith is a cancer prevention postdoctoral fellow at the Harvard TH Chan School of Public Health. Natalie works to promote the implementation of strong, evidence-informed policies to prevent and control chronic disease. To do this, she pursues research geared towards (1) simulating the comparative health and economic effects of public health policies, and (2) improving how researchers disseminate findings to policymakers. She earned her PhD in Health Policy and Management at UNC Chapel Hill in 2021 and her MS in Biostatistics, also from UNC Chapel Hill, in 2017. Google Scholar.



Paul N. Zivich, MPH, PhD. Paul Zivich is an epidemiologist who specializes in causal inference, with a specific focus on interference, infectious diseases, and statistical software. Paul is a postdoctoral fellow at the UNC Gillings School of Global Public Health. Google Scholar.

1b. How to Cite

Manuscripts related to this work are currently under review or in progress. To support the work of our team of junior scholars and students, you can directly site these materials via the Carolina Digital Repository (search the title of the workshop).

We also suggest you check out our blog series, which is also citable via the Carolina Digital Repository.

Martinez RAM, Andrabi N, Goodwin AN, Wilbur RE, Zivich PN. Thoughtfully Measuring and Interpreting Race In Population Health Research. *IAPHS Blog* blog. 2021. https://doi.org/10.17615/bs67-jj32

Re-use Request

You are welcome to use all of these resources for your own personal exploration.

Please ask reach out to the team (biosocial.collab@gmail.com) or to Rae Anne Martinez (raeannem@ad.unc.edu) before re-using or adapting these materials for delivery in a course or other format, so that we may check with the other content developers for permission as appropriate.

2. Summary of Workshop Information

Conceptualization (Definition)

Why is conceptualization important?

It is important to clearly communicate your concepts of race and ethnicity in order to ensure that you have a clear understanding of what you are measuring and so that you can provide a strong justification of why the measures are relevant to your research question. Providing your definition of race and/or ethnicity in publications also aids in dispelling misconceptions or misinterpretations regarding the definition and use of racial and ethnic constructs in your work.

Example Definitions:

<u>Race</u>: Fluid, relational, contextually-specific social construct often derived by assigning social meaning to observable characteristics like skin tone or hair texture.^{1, 2}

<u>Ethnicity</u>: Fluid, relational, and contextually-specific social construct. It is often used to reflect cultural commonalities.¹

Conceptualization Action Items:

For your own research:

- 1. How do you define race? How do you define ethnicity? How are your definitions for race and ethnicity similar or different? Do they overlap?
- 2. Why is race and/or ethnicity important for your research question?
- 3. Where do race and/or ethnicity fit into your conceptual model?
- 4. Do you state what your conceptualization of race is (social construct, essentialist, or other) in your manuscript?

As you review others' research:

- 1. Can you tell what the authors' conceptualization of race and/or ethnicity is (social construct, essentialist, or other)?
- 2. Do they combine or conflate race with ethnicity?

One Thing You Need to Do for Operationalization:

Ask yourself, "Could someone reviewing this article tell what my conceptualization (definition) of race and/or ethnicity is (social construct, essentialist, or other)?

Operationalization (Measurement)

Why is measurement important?

Purposeful measurement of race and ethnicity is important because measurement is indelibly linked to results. Without a proper understanding of how studies have measured race and ethnicity, it is not possible to synthesize findings across studies in order to draw overarching conclusions.

Table Adapted from Roth (2016).

Dimension of Race	Definition	Measurement
Difficision of Nace	Definition	ivieasurement
Racial Identity	Subjective self-identification, not limited to preset options	Open-ended self-identification questions
Racial Self- Classification	The race you check on an official form or survey with constrained options (e.g. the Census)	Close-ended survey question
Observed Race	The race that others believe you to be	Interviewer classification
Appearance-based	Observed race based on readily observable characteristics	Interview classification with instructions to classify on first observation
Interaction-based	Observed race based on characteristics revealed through interactions (e.g. language, accent, surname)	Interviewer classification with instructions to classify after interaction or survey
Reflected Race	The race you believe others assume you to be	"What race do most people think you are?"
Phenotype	Racial appearance	Usually interviewer classification
Color	Skin color	Usually interviewer classification on a Likert scale or color palette
Other features	Hair texture or color, nose shape, lip shape, eye color	Usually interviewer classification on a series of categorical variables

Measurement Action Items:

For your own research:

- 1. What dimension of race and/or ethnicity did you assess? Was this the dimension you were intending to assess?
- 2. Can you justify why this measure of race and/or ethnicity will best address your research question?
- 3. Have you thought critically about the limitations of this measurement?

As you review others' research:

- 1. What dimension of race and/or ethnicity was assessed?
- 2. Do the authors explicitly justify why this measure of race and/or ethnicity is best fit for their study?
- 3. Do authors discuss limitations of their measurement?

One Thing You Need to Do for Measurement:

Ask yourself, "Could someone reviewing this article state what dimension of race and/or ethnicity I used in my methods?"

Operationalization (Coding)

Why is coding important?

Thoughtful coding of race and ethnicity data is important because the practice of coding can fundamentally alter the results of data, analysis, and ultimately, the interpretation of results.

Selecting a coding schema:

- 1. How are variables being combined?
- 2. Why are they being combined?
- 3. Does the resulting code match the research guestion?
- 4. Are the findings still representative of the original data?

Guiding questions on the "Other" category:

In your own research:

- 1. What purpose does the "other" category serve in my research?
 - a. Does it provide meaningful information about/for the populations included in the category?
 - b. Does it provide a valuable comparison to the groups outside of the "other" category?

As you review others' research:

- 1. Do they use an "other" category? If so, do they say who is in it? Do they justify its use?
 - a. What are the benefits and limitations of using this category for the researchers?
 - b. What are the benefits and limitations of using this category for the participants?

Solutions to Common Coding Problems:

- 1. Resist the temptation to collapse categories unnecessarily
- 2. If you must use an "Other" category, ensure that it serves a specific analytic purpose
- 3. Be transparent about your coding decisions in both analysis and publication

One Thing You Need to Do for Coding:

Ask yourself, "Could someone reviewing this article reproduce my coding scheme from the original data?"

Peer Review

Why is interrogating communication of race and/or ethnicity in peer review important?

As authors, reviewers, and editors, we respect the peer review process for many reasons. The greatest, perhaps, in theory is that peer review keeps us accountable to doing "good" research. A hugely simplified view of "good" research to our team means asking important population health questions, demonstrating methodologic rigor according to our own discipline, and reproducibility or validation of study findings. Failure to communicate definitions of complicated constructs, to fully explain measures, to justify (re)coding schemes, or motivate the inclusion or use of data in publication limits our ability to reproduce studies. During peer review, we have the privilege of holding others accountable and ensuring that all information is clearly communicated.

Guiding questions:

- 1. Do the authors clearly motivate **why** racial or ethnic data was important to the study question?
- 2. Do the authors define race and/or ethnicity is (i.e., **what** is race? A social construct, a biological construct, or something else)?
- 3. Do the authors unambiguously state the measure of race and/or ethnicity that was used (e.g., **who** answered the question and **how** was it asked)?
- 4. Do the authors state **how** they code race & ethnicity?

TDLR: Ensure the papers you review include the how, who, what, & why of race and ethnicity

A few things You Need to Do in Peer Review:

- 1. Check the guidelines!
 - Check to see if journals you review for follow ICMJE guidelines
 - Check to see if journals you review for have additional policies
- 2. Ensure that papers you review meet those guidelines
- 3. (If you are in the position to do so) Suggest new accountability measures
 - Suggest that journals introduce more rigorous guidance
 - Suggest that journals introduce accountability measures
- 4. Call out biological racism

3. Workshop Activities

IAPHS 2021 Preconference Workshop: Clear communication of race and ethnicity for public health Martinez, Andrabi, Goodwin, Wilbur, Smith, Zivich. September 23rd, 2021

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4. Resources for Clear Communication

4a. Capitalization Practices

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4b. Current Guidelines: Journals & Institutions

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4c. Key Readings

Articles on clearly communicating race & ethnicity in interdisciplinary, public health literature.

Boyd RW, Lindo EG, Weeks LD, McLemore MR. On Racism: A New Standard For Publishing On Racial Health Inequities. *Health Affairs Blog* blog. 2020

Duggan CP, Kurpadm A, Stanford FC, Sunguya B, Wells JC. Race, ethnicity, and racism in the nutrition literature: an update for 2020. *Am J Clin Nutr.* 2020;112:1409-1414. doi:10.1093/

Raff JA, Mulligan CJ. Race reconciled II: Interpreting and communicating biological variation and race in 2021. *Am J Phys Anthropol.* Jun 2021;175(2):313-315. doi:10.1002/ajpa.2429

Wade L. Tips for scientists writing about race and genetics for the general public. *Am J Phys Anthropol.* Jun 2021;175(2):506-507. doi:10.1002/ajpa.24151

Articles on terminology, inclusive, and people first language.

Appiah KA. The Case for Capitalizing the B in Black. *The Atlantic*. 2020. June 18, 2020. Accessed September 20th, 2021. https://www.theatlantic.com/ideas/archive/2020/06/time-to-capitalize-blackand-white/613159/

del Río-Gonzalez AM. To Latinx or Not to Latinx: A Question of Gender Inclusivity Versus Gender Neutrality. *Am J Public Health*. 2021;111:1018-21.

Likis FE. Inclusive Language Promotes Equity: The Power of Words. *J Midwifery Womens Health*. Jan 2021;66(1):7-9. doi:10.1111/jmwh.13225

Gartner DR, Wilbur RE, McCoy ML. "American Indian" as a racial category in public health: implications for communities and practice. *Am J Public Health*. 2021; (released Sept. 16, 2021).

What is race & ethnicity?

Ford CL, Harawa NT. A new conceptualization of ethnicity for social epidemiologic and health equity research. *Soc Sci Med.* Jul 2010;71(2):251-258. doi:10.1016/j.socscimed.2010.04.008

Lopez D, Espiritu Y. Panethnicity in the United States: A theoretical framework. *Ethnic and Racial Studies*. 1990;13(2):198-224. doi:10.1080/01419870.1990.9993669

Omi M, Winant H. Racial Formation in the United States. 3rd. Ed. ed. 2015.

Rodríguez CE. Changing Race: Latinos, the Census, and the History of Ethnicity in the United States. 2000.

Roth WD. *Race migrations: Latinos and the cultural transformation of race.* Stanford University Press; 2012.

How do we measure race & ethnicity?

Boda, Z. Social influence on observed race. Sociological Science. 2018; 5:29-57.

Cormack, D., Reid, P., & Kukutai, T. Indigenous data and health: Critical approaches to 'race'/ethnicity and Indigenous data governance. *Public health*. 2019; 172:116-118.

Davenport, L. The fluidity of racial classifications. Annual Review of Political Science. 2020; 23:221-240.

Dixon, A. R., & Telles, E. E. Skin color and colorism: Global research, concepts, and measurement. *Annual Review of Sociology*. 2017; 43:405-424.

Ford CL, Airhihenbuwa CO. The public health critical race methodology: praxis for antiracism research. *Soc Sci Med.* Oct 2010;71(8):1390-8. doi:10.1016/j.socscimed.2010.07.030

Roth WD. The multiple dimensions of race. *Ethnic and Racial Studies*. 2016;39(8):1398-1406. doi:10.1080/01419870.2016.1153693

Roth, W. D. Methodological pitfalls of measuring race: international comparisons and repurposing of statistical categories. *Ethnic and Racial Studies*. 2017; 40(13):2347-2353.

Roth, W. D. Establishing the denominator: The challenges of measuring multiracial, Hispanic, and Native American populations. *The ANNALS of the American Academy of Political and Social Science*. 2018; 677(1):48-56.

Roth, W. D. Unsettled identities amid settled classifications? Toward a sociology of racial appraisals. *Ethnic and Racial Studies*. 2018; 41(6):1093-1112.

Saperstein, A., & Penner, A. M. Racial fluidity and inequality in the United States. *American journal of sociology*. 2012; 118(3):676-727.

Examples of multiple dimensions of race in health research

Cobb, R. J., Thomas, C. S., Pirtle, W. N. L., & Darity Jr, W. A. Self-identified race, socially assigned skin tone, and adult physiological dysregulation: assessing multiple dimensions of "race" in health disparities research. *SSM-population health*. 2016; 2:595-602.

López, N., Vargas, E., Juarez, M., Cacari-Stone, L., & Bettez, S. What's your "street race"? Leveraging multidimensional measures of race and intersectionality for examining physical and mental health status among Latinxs. *Sociology of Race and Ethnicity*. 2018; 4(1):49-66.

Wassink, J., Perreira, K. M., & Harris, K. M. Beyond race/ethnicity: skin color and cardiometabolic health among blacks and Hispanics in the United States. *Journal of immigrant and minority health*. 2017; 19(5):1018-1026.

White, K., Lawrence, J. A., Tchangalova, N., Huang, S. J., & Cummings, J. L. Socially-assigned race and health: a scoping review with global implications for population health equity. *International journal for equity in health*. 2020; 19(1): 1-14.

Race, Genetics, & Biology

Bustamante, C. D., De La Vega, Francisco M, & Burchard, E. G. Genomics for the world. *Nature*. 2011; 475(7355):163-165. doi:10.1038/475163a

Collins, F. What we do and don't know about 'race', 'ethnicity', genetics and health at the dawn of the genome era. *Nature Genetics*. 2004: 36(11):S13-S15. doi:10.1034/ng1436

Graves JL. Biological Theories of Race at the Milennium *The Emperor's New Clothes: Biological Theories of Race at the Milennium*. 2003:21-31:chap 1.

Graves JL. African Americans in evolutionary science: where we have been, and what's next. *Evolution: Education and Outreach.* 2019;12(1)doi:10.1186/s12052-019-0110-5

Phillips, M. S., Donnelly, P., Cardon, L. R., & Marchini, J. The effects of human population structure on large genetic association studies. *Nature Genetics*. 2004; 36(5): 512-517. doi:10.1038/ng1337

Popejoy AB. Too many scientists still say Caucasian. Nature. 2021; 596:463.

Rosenberg, Noah A., Jonathan K. Pritchard, James L. Weber, Howard M. Cann, Kenneth K. Kidd, Lev A. Zhivotovsky, & Marcus W. Feldman. Genetic structure of human populations. *Science*. 2002; 298 (5602): 2381-2385.

Sirugo, G., Williams S.M., & Tishkoff, S.A. The missing diversity in human genetic studies. *Cell.* 2019; 177(1): 26-31. Doi: 10.1016/j.cell.2019.02.048]

TallBear, K. Native American DNA: Tribal belonging and the false promise of genetic science. 2013.

Tishkoff, S. A., Tishkoff, S. A., & Kidd, K. K. Implications of biogeography of human populations for 'race' and medicine. *Nature Genetics*. 2004; 36(11;11S;): S21-S27. doi:10.1038/ng1438

Williams JE. They Say It's in the Genes: Decoding Racial Ideology in Genomics. *Journal of Contemporary Ethnography*. 2011;40(5):550-581. doi:10.1177/089124161141277

Yudell, M., Roberts, D., DeSalle, R., & Tishkoff, S. Taking race out of human genetics. *Science*. 2016; 351(6273):564-565. doi:10.1126/science.aac4951

5. References

5a. Sections 1-4.

- 1. Krieger N. A glossary for social epidemiology. *J Epidemiol Community Health*. 2001;55:693-700.
- 2. Omi M, Winant H. Racial Formation in the United States. 3rd. Ed. ed. 2015.
- 3. Flanagan A, Frey T, Christianasen SL, Bauchner H. The Reporting of Race and Ethnicity in Medical and Science Journals: Comments Invited. *JAMA*. 2021;325(11):1049-1052.
- 4. Flanagin A, Frey T, Christiansen SL. Updated Guidance on the Reporting of Race and Ethnicity in Medical and Science Journals. *JAMA*. 2021;326(7):621-627. doi:10.1001/jama.2021.13304
- 5. American Sociological Association. ASA Style Guide. 6th Ed. ed. 2019.
- Council of Science Editors Board of Directors. Scientific Style and Format
 Update: Capitalize Racial and Ethnic Group Designations. Sci Ed. October 20, 2020 2020;43(3):97.
 doi:https://doi.org/10.36591/SE-D-4303-97
- 7. Kaufman JD, Hajat A. Confronting Environmental Racism. *Environ Health Perspect*. May 2021;129(5):51001. doi:10.1289/EHP9511
- 8. Winker MA. Measuring Race and Ethnicity: Why and How? JAMA. 2004;292(13):1612-1614.

5b. Slide Decks

Introduction

LaVeist TA. Why we should continue to study race... But do a better job: an essay on race, racism, and health. *Ethn Dis.* 1996;6:21-29

Part 1: Conceptualization

Beavers KM, Neiberg RH, Kritchevsky SB, et al. Association of Sex or Race With the Effect of Weight Loss on Physical Function: A Secondary Analysis of 8 Randomized Clinical Trials. *JAMA Netw Open*. Aug 3 2020;3(8):e2014631. doi:10.1001/jamanetworkopen.2020.14631

Gartner DR, Delamater PL, Hummer RA, Lund JL, Pence BW, Robinson WR. Integrating Surveillance Data to Estimate Race/Ethnicity-specific Hysterectomy Inequalities Among Reproductive-aged Women: Who's at Risk? *Epidemiology*. May 2020;31(3):385-392. doi:10.1097/EDE.000000000001171

Gould, Stephen Jay. The Mismeasure of Man. 1996. New York, New York: Norton & Company.

Johnson TP, Cho YIK, Holbrook AL, O'Rourke D, Warnecke RB, Chavez N. Cultural Variability in the Effects of Question Design Features on Respondent Comprehension of Health Surveys. *Annals of Epidemiology*. 2006;16(9):661-668. doi:10.1016/j.annepidem.2005.11.011

Jones CP. Invited Commentary: "Race," Racism, and the Practice of Epidemiology. *Am J Epidemiol*. 2001;154(4):299-304.

Krieger, N. A Glossary for Social Epidemiology. *Journal of Epidemiology & Community Health.* 2001; 55(10): 693-700.

Martinez RAM, Andrabi N, Goodwin AN, Wilbur RE, Zivich PN. Thoughtfully Measuring and Interpreting Race In Population Health Research. *IAPHS Blog.* 2021. https://doi.org/10.17615/bs67-jj32

Nott, Josiah Clark and George Robert Gliddon. 1857. *Indigenous races of the earth: or, New Chapters of Ethnological Inquiry; Including Monographs on Special Departments Contributed by Alfred Maury, Francis Pulszky, and J. Aitken Meigs. Presenting Fresh Investigations, Documents, and Materials.* Philadelphia: J. B. Lippincott Publishing.

Wade, Peter. "The Meaning of 'Race' and 'Ethnicity'." Pp. 4-23 in *Race and Ethnicity in Latin America*. 1997 (2010). 2nd ed. New York: Pluto Press.

Weber, Max. "The Origins of Ethnic Groups." *Ethnicity*, eds.: John Hutchinson and Anthony Smith. 1996. New York: Oxford University Press.

Williams DR, Lawrence JA, Davis BA. Racism and Health: Evidence and Needed Research. Annu Rev Public Health. 2019;40(1):105-125. doi:10.1146/annurev-publhealth-040218-043750

Part 2: Operationalization (Measurement)

Roth WD. The multiple dimensions of race. *Ethnic and Racial Studies*. 2016;39(8):1398-1406. doi:10.1080/01419870.2016.1153693

Pew Research Center. 2015. "What the Census Calls Us: A Historical Timeline." Pew Research Center. Retrieved December 10, 2018. (http://www.pewsocialtrends.org/interactives/multiracial-timeline/)

Alang S, McAlpine D, McClain M. Police Encounters as Stressors: Associations with Depression and Anxiety across Race. *Socius: Sociological Research for a Dynamic World.* 2021;7:1-13. doi:10.1177/2378023121998128

Shimbo D, Muntner P, Mann D, et al. Association of left ventricular hypertrophy with incident hypertension: the multi-ethnic study of atherosclerosis. *Am J Epidemiol*. Apr 15 2011;173(8):898-905. doi:10.1093/aje/kwq509

Part 3: Coding

Hales CM, Fryar CD, Carroll MD, Freedman DS, Aoki Y, Ogden CL. Differences in obesity prevalence by demographic characteristics and urbanization level among adults in the United States, 2013-2016. *JAMA*. 2018; 319(23):2419-2429.

Wiener RC, Findley PA, Shen C, Dwibedi N, Sambamoorthi U. Human papillomavirus (HPV) vaccine utilization among adults (18-29 years), BRFSS 2015. *Vaccine*. 2020; 38(33):5119-5122.

Kaufman JS, Long AE, Youlian L, Cooper RS, McGee DL. The relationship between income and mortality in U.S. Blacks and Whites. *Epidemiology*. 1998; 9(2):147-155

Tucker, C.R., S. Miller, and J. Parker. 2002. "Comparing Census Race Data Under the Old and the New Standards." Pp. 365–90 in *The New Race Question: How the Census Counts Multiracial Individuals*, J. Perlmann and M.C. Waters, eds. New York: Russell Sage Foundation.

Liebler, CA; Halpern-Manners, A. A practical approach to using multi-race response data: a bridging method for public-use microdata. *Demography*. 2008; 45(1): 143-155.

Part 4: Peer Review

Boyd RW, Lindo EG, Weeks LD, McLemore MR. On Racism: A New Standard For Publishing On Racial Health Inequities. *Health Affairs Blog* blog. 2020.

International Committee of Medical Journal Editors. Uniform Requirements for Manuscripts Submitted to Biomedical Journals: Writing and Editing for Biomedical Publication. *ICMJE*. 2004:1-15. http://www.icmje.org/recommendations/archives/2004_urm.pdf

International Committee of Medical Journal Editors. Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly Work in Medical Journals: Updated December 2019. 2019:1-19. http://www.icmje.org/icmje-recommendations.pdf

Flanagan A, Frey T, Christianasen SL, Bauchner H. The Reporting of Race and Ethnicity in Medical and Science Journals: Comments Invited. *JAMA*. 2021;325(11):1049-1052

Flanagan A, Frey T, Christiansen SL. Updated Guidance on the Reporting of Race and Ethnicity in Medical and Science Journals. *JAMA*. 2021;326(7):621-627. doi:10.1001/jama.2021.13304

Winker MA. Measuring Race and Ethnicity: Why and How? JAMA. 2004;292(13):1612-1614.

Closing thoughts

Bosman J, Kasakove S, Victor D. U.S. life expectancy plunged in 2020, especially for Black and Hispanic Americans. *New York Times (Online)*. 2021.

Kolata G. Social inequities explain racial gaps in pandemic, studies find. *New York Times (Online)*. 2020 Mandavilli A. Medical journals blind to racism as health crisis, critics say. *New York Times (Online)*. 2021.

Richard A Oppel Jr, Gebeloff R, Lai KR, Wright W, Smith M. The fullest look yet at the racial inequity of coronavirus. *The Salt Lake tribune*. 2020.