Checklist for Assessing Bias in Medical Education Content

This checklist is intended to promote reflection regarding how race, gender, and other indicators are represented in medical education. Use the pilot checklist below while reviewing your slides, lecture notes (including notes you use personally while lecturing but do not share with students), handouts, readings, self-directed learning materials (including online modules, videos, etc.), and exam questions.

Consider whether each indicator below - all of which are associated with marginalization and inequality in healthcare, access to care, and health outcomes – is present in your session or course content. This might be a list of bullet-point facts, a single sentence, a visual image, a description of a patient in a vignette, a table of patient characteristics from a clinical trial, etc. If you have photos of *humans*, regardless of skin color, race and gender are present in your content.

If you make changes based on this checklist, please let us know. We appreciate your feedback and will continue to revise this tool to be more effective. **If you are not sure how to respond or what to do next, please contact us.** We are happy to provide an objective second look at your materials or assist with resources and referrals to experts in specific domains who can help.

Amy Caruso Brown, MD, MSc, MSCS – brownamy@upstate.edu

1. Does the lecture include any mention of race or ethnicity? ☐ Yes ☐ No → Skip to question #2		
Are *explicit* biological differences between racial or ethnic groups stated?	☐ Yes → ☐ No	a. Consider whether this is essential information b. Verify that this is scientifically accurate based on most current research and that you are presenting the science behind the difference c. If social/structural determinants of health also contribute to the difference, say so d. Assure that students understand racial groups are not biological constructs e. If the rationale for inclusion is that it is a cue for the correct answer on multiple-choice tests, make *that* clear (evidence suggests that excessive reliance on quick associations between patient characteristics and diseases leads to misdiagnosis)
Are biological differences between racial or ethnic groups *implied*?	☐ Yes → ☐ No	a. Consider whether this is essential information; if so, state it *explicitly* b. Provide context so that students understand the role of social/structural determinants of health in contributing to differences
Could the content be perceived as promoting stereotypes, bias, shame or stigma?	☐ Yes → ☐ Not sure (see table on reverse for examples) ☐ No	
For clinical vignettes, standardized patients, and case-based learning materials specifically:		
Is the patient's race or ethnicity critical to the vignette?	☐ Yes → Refer to 1st three questions above ☐ No → Remove reference to race/ethnicity; use initials, not names	
For visual images (photo/video) specifically:		
Does the image add something important to the lecture?	☐ Yes ☐ No → Remove image	
Could the image suggest stereotypes or promote bias?	☐ Yes → Remove or replace image ☐ Not sure → Email us ☐ No	
If using multiple images or an image with multiple individuals, are the people depicted racially and ethnically diverse?	☐ Yes ☐ No → Select more representative images	
If using images of physical findings, do they represent the full spectrum of skin tones and physical features found among our patients?	☐ Yes ☐ No → Select more representative images	
2. Does the lecture include any mention of sex, gender, or sexual orientation? ☐ Yes ☐ No → #3		
Are all sexes, genders, and/or sexual orientations appropriately represented in the content?	☐ Yes ☐ Not sure → Email us ☐ No → Assess whether this is truly appropriate to the subject matter	
If biological sex is presented in a binary fashion, is this appropriate?	☐ Yes ☐ Not sure → Email us ☐ No → Change it	
Is gender presented as part of a spectrum, rather than a binary concept?	☐ Yes ☐ Not sure → Email us ☐ No → Change it	
If healthcare professionals are mentioned (e.g., in the context of a vignette), is the physician always a "he"? Is the nurse, social worker, etc. always a "she"?	☐ Yes → Use gender-neutral language or alternate he/she ☐ No	
Could the content be perceived as promoting stereotypes, bias, shame or stigma?	☐ Yes → Change it ☐ Not sure (see table on reverse) ☐ No	
3. Does the lecture include any mention of disability or mental illness (including substance use)? ☐ Yes ☐ No → #4		
Could the content be perceived as promoting stereotypes, bias, shame or stigma?	☐ Yes → Change it ☐ Not sure (see table on reverse) ☐ No	

Pilot Checklist for Assessing Bias in Undergraduate Medical Education

4. Does the lecture include any mention of weight? ☐ Yes ☐ No → #5	
Could the content be perceived as promoting stereotypes, bias, shame or stigma?	☐ Yes → Change it ☐ Not sure (see table below) ☐ No
5. Does the lecture include any mention of immigration status? ☐ Yes ☐ No → #6	
Could the content be perceived as promoting stereotypes, bias, shame or stigma?	☐ Yes → Change it ☐ Not sure (see table below) ☐ No
6. Does the lecture include any mention of poverty? ☐ Yes ☐ No	
Could the content be perceived as promoting stereotypes, bias, shame or stigma?	☐ Yes → Change it ☐ Not sure (see table below) ☐ No

Indicator	**Examples That May Promote Stereotypes, Bias, Shame, and Stigma**
Race	• Teaching the practice of race "correction" for highly variable physiological measures such as spirometry values and glomerular filtration rate, based on outdated studies, neglecting intrinsic variation within racial groups • Presenting associations between race and disease incidence without context • Showing two photos side-by-side during an obesity lecture: one depicting a family comprised of thin white individuals sitting down to a healthy dinner and one depicting a family of overweight black individuals sitting in front of fast food • Consistently showing images of black individuals when addressing diabetes or obesity
Ethnicity	• Assuming Latinx patients are undocumented immigrants / migrant workers** • Stating or implying that all patients from a particular culture participate in certain practices or reject certain medical interventions (e.g., "Muslim women are not permitted to be examined by male physicians")
Sex and gender	• Pediatric vignettes in which patients are invariably accompanied by a mother (never a father, two fathers, two mothers, grandparents, etc.) or only involve nuclear families with heterosexual, married parents and biological offspring • Including maternal age as a risk factor for diseases/conditions while failing to list other risk factors that are epidemiologically more important • Disproportionate course content/contact hours devoted to conditions that impact men more than women (e.g., time spent in pharmacology on drugs for erectile dysfunction vs. time spent on contraceptives)** • Teaching students that intersex patients are really male or female, once diagnosed properly • Failure to use preferred pronouns for gender-nonconforming patients in clinical vignettes • Conflating gender identity with sexual orientation
Sexual orientation	• Using language in clinical vignettes or discussions of history-taking such as "The patient *admitted* to having sex." • Teaching students to take a sexual history that does not account for the full spectrum of sexual identities and encourages categorization • Teaching students to label sexual identities and behaviors as "high-risk"
Disability	• Failure to recognize that most people with disabilities regard their quality of life as comparable to those without disabilities • Failure to use person-first language • Assumption that people with disabilities' quality of life is not comparable to those without disabilities • Assuming that preventive health is not as important to patients with disabilities
Mental health	• Vignettes that present mentally ill patients as violent • Vignettes that undermine the dignity of people with mental health issues by not recognizing how some might value "neurodiversity" as well as wishing treatment for symptoms that cause suffering
Age	• Focusing only on declining health/quality of life and need for advance directives/limitations of care; ignoring positive portrayals of aging and geriatric care • Neglecting consideration of sexual health at all ages
Substance use	• Using language of personal responsibility / self-control to discuss addiction, rather than treating it as a disease • Referring to substance abuse/dependence rather than substance use disorder (as in DSM-V) or referring to a patient as an "addict"
Weight	• Vignettes that describe overweight and obese patients as "noncompliant" • Emphasizing personal responsibility in discussions of obesity at the expense of important genetic/epigenetic, social and structural risk factors • Assuming that all overweight and obese are unhealthy, when it is much more complicated biologically
Immigration status	• Focusing only on language barriers in clinical encounters between physicians and patients who are immigrants (assumes immigrants never speak English and neglects other important features)
Poverty	• Presenting race as a risk factor for disease occurrence or outcome without explaining role of poverty, access to healthcare, etc. • Presenting poor people as lazy or lacking in character
Any comment about any of the above that is meant to elicit laughter	

**These examples require some awareness of content across sessions, units and courses. Remember that students can recognize patterns of bias that a single lecturer or facilitator may not appreciate. When reviewing the details of a vignette, think about how it would look if *every* patient with that condition was presented as being a particular race, ethnicity, sexual orientation, etc.