

## Supplemental Digital Appendix 1

### Race and Culture Guide for Editors of Teaching Cases

The race and culture guide includes definitions of key concepts followed by six sections for use in structured case review. These sections provide questions to consider, examples of language, and revision suggestions, as well as the rationale and supporting evidence for recommendations. Where indicated, case examples are from virtual patient teaching cases from Aquifer’s Internal Medicine, Family Medicine, and Pediatrics courses. Some of the good examples were created for this guide.

Key Concepts Defined	
Structural competency	“The ability for health professionals to recognize and respond with self-reflexive humility and community engagement to the ways negative health outcomes and lifestyle practices are shaped by larger socioeconomic, cultural, political, and economic forces.” <sup>1</sup>
Social and structural determinants of health (SSDOH)	<p>The hierarchical institutions, economic systems, policies, cultural norms, and infrastructural organization of our social world that directly/indirectly worsen health outcomes for some groups of people more than others. “A society’s social structure generates its specific patterns of SSDOH.”<sup>1</sup></p> <p>Examples:</p> <ul style="list-style-type: none"> <li>- Socioeconomic status and income inequality</li> <li>- Neighborhood segregation leading to poor access to grocery stores</li> <li>- War-torn childhood/lack of resources in home country leading to undocumented immigrant status in the U.S.</li> <li>- Institutional policies (e.g. public versus private health care, incarceration rates, etc.)</li> <li>- Military disruptions or political embargoes</li> </ul>
Structural vulnerability	“An individual’s or a population group’s condition of being at risk for negative health outcomes through their interface with socioeconomic, political, and cultural/normative hierarchies. Patients are structurally vulnerable when their location in their society’s multiple overlapping and mutually reinforcing power hierarchies (e.g., socioeconomic, racial, cultural) and institutional and policy-level statuses (e.g., immigration status, labor force participation) constrain their ability to access health care and pursue healthy lifestyles.” <sup>1</sup>
Race, ethnicity, culture and minority identity ( <i>referred to as “race/culture” in the guide</i> )	<u>Race</u> has traditionally been defined as a “construct of human variability based on perceived differences in biology, physical appearance, and behavior.” <sup>2</sup> However, this conception of race rests on the false premise that natural distinctions grounded in significant biological and behavioral differences can be drawn between groups. Race is a socially meaningful construct, and is of limited biological significance.

	<p>The concept of <u>ethnicity</u> is an attempt to further differentiate racial groups and account for diversity within the population; however, like race, it carries its own historical, political, and social baggage. “Common threads that may tie one to an ethnic group include skin color, religion, language, customs, ancestry, and occupational or regional features. In addition, persons belonging to the same ethnic group share a unique history different from that of other ethnic groups. Usually a combination of these features identifies an ethnic group.”<sup>2</sup></p> <p>“The concept of <u>culture</u> as distinct from race/ethnicity has been proposed as a better explanation for differences in health behavior and health outcomes. Culture is defined as integrated patterns of human behavior that include the language, thoughts, communications, actions, customs, beliefs, values, and institutions of racial, ethnic, religious, or social groups. Culture can be transmitted intergenerationally. Culture in the context of health behavior has been defined as “unique shared values, beliefs, and practices that are directly associated with a health-related behavior, indirectly associated with a behavior, or influence acceptance and adoption of the health education message.”<sup>3</sup></p> <p>Importantly, knowing someone's ethnic identity or national origin does not reliably predict beliefs and attitudes. In most instances, the definition of culture is nebulous and imprecise. Inferring that certain health behaviors or outcomes differ by race, ethnicity, culture, may be misleading because they rarely account for the distinct differences within racial or ethnic groups or cultures.</p> <p>The term <u>minority</u> refers to “a group of people who, because of their physical or cultural characteristics, are singled out from the others in the society in which they live for differential and unequal treatment, and who therefore regard themselves as objects of collective stigma and discrimination. The existence of a minority in a society implies the existence of a corresponding dominant group enjoying higher social status and greater privileges.” Characteristics that have been linked to <u>minority group identity</u> include sex, gender, sexual orientation, disability, ethnicity, nationality, race, language, culture, and religion. As a result, an individual who is a member of more than one defined minority group may be multiply stigmatized.<sup>4</sup></p>
<p>Reductionism and essentialism</p>	<p><u>Reductionism</u> is the process by which “complex phenomena are partitioned into smaller segments that are then dealt with piecemeal.”<sup>5</sup> In medicine, we use <u>reductionism</u> to represent whole lives of people as racial, or ethnic, or cultural minutiae. Often, this results in a loss of understanding of unique and shared experiences of people from minority backgrounds. Reducing ethnicities and cultures to a single category comprised of a checklist of items results in a single story, which creates stereotypes that may not just be untrue, but are also incomplete. This single story not only perpetuates stereotypes but also prevents delivery of adequate, necessary and equitable care.</p>

	<p><u>Essentialism</u> is a concept that refers to defining and classifying a person’s “true and fixed essence.”<sup>5</sup> In the context of culture, <u>essentialism</u> is the practice of categorizing groups of people within a culture, or from other cultures, according to essential qualities. However, through processes like diagnosis and “labelling”, we are likely to assume that patients carry this “named status” into every aspect of their lives.<sup>5</sup></p>
<p>Implicit bias</p>	<p>“Stereotypes are the belief that most members of a group have some characteristic. Some examples of stereotypes are the belief that women are nurturing or the belief that police officers like donuts. An explicit stereotype is the kind that you deliberately think about and report. An <u>implicit stereotype</u> is one that is relatively inaccessible to conscious awareness and/or control. Even if you say that men and women are equally good at math, it is possible that you associate math more strongly with men without being actively aware of it. In this case we would say that you have an implicit math + men stereotype.”<sup>6</sup></p>
<p>Critical consciousness</p>	<p>“<u>Critical consciousness</u> refers to the process by which individuals apply critical thinking skills to examine their current situations, develop a deeper understanding about their concrete reality, and devise, implement, and evaluate solutions to their problems. <u>Critical consciousness</u> is a key ingredient for positive behavior change. It is a state of understanding how power and difference shape social structure and interaction. It has two components: anti-oppressive thinking and anti-oppressive action.”<sup>7</sup></p>
<p><b>Key concept references</b></p> <ol style="list-style-type: none"> <li>1. Bourgois P, Holmes SM, Sue K, Quesada J. Structural vulnerability: Operationalizing the concept to address health disparities in clinical care. <i>Academic Medicine</i>. 2017;92(3):299-307.</li> <li>2. Oppenheimer, GM. Paradigm lost: Race, ethnicity, and the search for a new population taxonomy. <i>American Journal of Public Health</i>. 2001;91(7):1049-55.</li> <li>3. Egede, LE. Race, ethnicity, culture, and disparities in health care. <i>JGIM</i>. 2006;21(6):667-669.</li> <li>4. Viladrich A, Loue S. Minority identity development. In: Loue S, ed. <i>Sexualities and Identities of Minority Women</i>. New York, NY: Springer; 2010.</li> <li>5. Pillay M. Cross-cultural practice: What is it really about? <i>Folia Phoniatr Logop</i>. 2003;55:293-299.</li> <li>6. Harvard Project Implicit. What are explicit and implicit stereotypes? <a href="https://implicit.harvard.edu/implicit/faqs.html#faq1">https://implicit.harvard.edu/implicit/faqs.html#faq1</a>. Published 2011. Accessed November 27, 2018.</li> <li>7. Newark Community Collaborative Board. Framework: Critical consciousness theory. <a href="http://newarkccb.org/framework/critical-consciousness-theory/">http://newarkccb.org/framework/critical-consciousness-theory/</a>. Published 2016. Accessed November 27, 2018.</li> </ol>	

**Section 1. Racial and ethnic health disparities are caused by social and structural determinants of health (SSDOH) and not based in genetics or biology.**

**Does your case include:**

- A patient of color and/or minority ethnicity?
- References to race and/or ethnicity as risk factors for disease?
- Race and/or ethnicity as a criteria for screening?
- Race and/or ethnicity in summary statements or medical documentation?

**Suggested case edits:**

- Race/ ethnicity/ sexual orientation/ cultural-identifier/ etc. should rarely, if ever, be listed in medical documentation or summary statements:
  - Descriptive identifiers in the summary statement (i.e. “Spanish-speaking”, “MSM”, “African American”, “Caucasian women”) should only be included if evidence exists in the literature for their relevance to clinical decision-making and improved patient outcomes for this particular clinical situation.
  - Good example: Obstetrics student asks about history of thalassemia in persons of Italian, Greek, Mediterranean or Asian descent. Summary statement: “22yo healthy G1P0 with family history of thalassemia and Greek ancestry” (Revised from Family Medicine, Case 14).
- Provide brief explanation for racial and/or ethnic health disparities when mentioned in cases:
  - Explanations should be included for both sections on “Risk factors” and “Screening criteria”
  - Explicitly state whether racial and/or ethnic health disparities are social/ structural versus genetic/ biological
  - Good example: “Diabetes screening is indicated for Native American, African-American, Hispanic American, Asian/South Pacific Islander race,” as per USPSTF, American Diabetes Association and American Association of Clinical Endocrinology guidelines, based on the fact that there is higher prevalence of DM within these populations. This may be because these populations are disproportionately exposed to SSDOH which increase the risk for development of DM. (Revised from Pediatrics, Case 4)
- Provide the evidence:
  - A literature search will show that for many diseases, a racial disparity in outcomes exists in the US. This should be highlighted, but the reason for the disparity must be clearly identified as a result of SSDOH (e.g. housing, jobs, etc.).
  - Include the latest data on racial and ethnic health disparities for common diseases and health status indicators (e.g. breast cancer, cervical cancer, colorectal cancer, breastfeeding rates, etc.) in both cases with and without patients of color.

**Rationale and evidence for case edits:**

- When the cause of a racial/ethnic health disparity is not known, we must be careful not to attribute these disparities to genetics/biology as evidence points to social/structural determinants having a greater impact on disparities than genetics.<sup>1</sup>
- Social/structural risk factors are modifiable, so attributing them to race/ethnicity eliminates possibility of intervention.
- Visual assessments of patient’s race are not evidence-based and are often inaccurate; evidence demonstrates that patient harm can occur when visual assessment is used to

identify patient race and then to guide clinical decision-making.<sup>1</sup>

- Race is a false surrogate for genetic/biological makeup (e.g. person who “looks white” may have one African great-grandparent and therefore 1/8 chance of inheriting that ancestor’s sickle-cell mutation).<sup>2</sup>

#### References

1. Acquaviva KD, Mintz M. Perspective: Are we teaching racial profiling? The dangers of subjective determinations of race and ethnicity in case presentations. *Academic Medicine*. 2010;85(4):702-5.
2. Braun L, Saunders B. Avoiding racial essentialism in medical science curricula. *AMA Journal of Ethics*. 2017;19(6):518-527.

**Section 2.** Providers should look to SSDOH to understand patient behaviors, rather than attributing patient behavior to patient’s race/culture.

#### Does your case include:

A patient of color and/or minority culture?

A patient of low socioeconomic status?

A patient who exhibits behaviors, such as not following treatment recommendations, missing health appointments, poor diet, lack of exercise, smoking, alcohol or other substance use, or sexual risk behaviors?

Discussion or counseling regarding patient health behavior?

#### Suggested case edits:

Within provider-patient discussions, have the provider and/or medical student explore the upstream factors affecting the patient’s behaviors, including but not limited to not following treatment recommendations, missing health appointments, poor diet, lack of exercise, smoking, alcohol or other substance use, or sexual risk behaviors, at least once.

- Provider goes beyond individual patient behaviors and probes on SSDOH at least once while taking history
  - Good example: If patient is not following provider recommendations, provider probes the root cause(s) by asking “why” at least five times.<sup>1</sup>
- Provider encourages student to ask at least one social context question while taking history.
- Good example:
  - Patient: “I can’t come to a hospital follow-up appointment.”
  - Provider: “What is getting in your way of coming to an appointment?”
  - Patient: “I don’t have any way to get there and it’s 3 miles away”
  - Provider: “Why don’t you have any way to get there?”
  - Patient: “My husband used to drive me but he isn’t here anymore.”
  - Provider: “Why isn’t he around?”
  - Patient: “He just got deported again. We’re undocumented”
  - Provider: “That sounds really difficult. We can help you get a subsidized bus pass today and have one of our social workers set you up resources and connect you to an immigration law firm. We also have a great family support group, if you’re able to come. What else can we do to help right now?”

Place health behaviors (e.g. smoking, poor diet, sedentary lifestyle, etc.) within the SSDOH context when the health behavior is listed as a “risk factor” for disease:

- Good example: Discussion of U.S. adolescent obesity trends by race, which attributes differences in obesity rates to “increased consumption of processed food” (Family Medicine,

Case 21), is expanded to include root causes of this dietary behavior, including a discussion of neighborhood food deserts, lack of access to affordable healthy foods, disparities within school systems and housing, and other structural etiologies of this health disparity.

- Good example: Inability to follow provider recommendations is framed as an issue of social context, not an individual patient behavior problem.

[ ] Remove and replace language in which the “health behavior” is used as an adjective to describe the patient:

- Good example: “homeless man” is replaced by “man experiencing homelessness”
- Good example: “drug addict” or “substance abuse” is replaced with “woman with substance use disorder”

[ ] Provide the evidence: Literature is cited showing that upstream context questions are helpful in managing care for both minority and non-minority patients.

- Good example: Author includes discussion and literature supporting the role of upstream context (*not race/culture*) in shaping patient’s dietary behaviors.

### Rationale and evidence for case edits:

- Health behaviors do not define individuals; racial identity does not predispose individuals to certain behaviors, social circumstances do.
- Attributing illness to patient behavior without acknowledging social context prevents students from understanding the root causes of health disparities and perpetuates racial and cultural biases.
- Students understand that health behaviors are often modifiable and social context-driven; students feel empowered to ask about SDOH and to work to address patients’ poor health behaviors in a structurally competent manner.<sup>2,3</sup>
- Medical education using patient cases should teach structural humility by not placing blame for illness onto individual patients and their behaviors, but instead on to their circumstances/ upstream social context of their lives.<sup>4</sup>
- Health care providers must model empathy and how to address patients’ poor health behaviors in a structurally competent manner.<sup>2</sup>

### References

1. Leveson NG. Applying systems thinking to analyze and learn from events. *Saf Sci.* 2011;49:55–64.
2. Rogers B. With understanding comes empowerment. *New Physician.* <http://www.onlinedigeditions.com/article/With+Understanding+Comes+Empowerment/1696112/206876/article.html>. Published April 2014. Accessed November 28, 2018.
3. Metz J, Hansen H. Structural competency: Theorizing a new medical engagement with stigma and inequality. *Social Science & Medicine.* 2014;103:126-33.
4. Tervalon M, Murray-García J. Cultural humility versus cultural competence. *J Health Care Poor Underserved.* 1998;9(2):117-125.

**Section 3.** Description of patients’ histories, health beliefs, and practices should direct attention to unique patient circumstances and SDOH, as opposed to racial/cultural stereotypes.

### Does your case include:

- [ ] A patient of color and/or minority culture?
- [ ] Attribution of a patient’s health belief or practice to cultural values, beliefs or practices?
- [ ] Guidance on how to approach minority patients (based on their “unique belief systems” as a group)?

### Suggested case edits:

- [ ] Cases should be written such that minority patients are not automatically assumed to be “the other” (racially/culturally different from the case author, physician or medical student):
  - Consider how a physician from the same racial/ cultural background as the patient might interact with this patient.
  - Explore whether the case might be written differently from that point of view. (Consider language like “we”, “they”, etc.)
- [ ] Avoid use of patient’s racial/cultural identity as a harbinger of pathology covered later in the case:
  - Mentioning relevant SDOH and health disparities for certain pathologies is important, but strive to include a variety of different portrayals of minority patients (not always giving them pathologies classically associated with their race/culture).
  - Good example: A black child is found to have leukemia, instead of sickle cell disease.
  - Good example: A trans woman is found to have meningitis, instead of HIV/AIDS.
- [ ] Exercise caution and restraint when offering instructions on how to approach patients based solely on their racial/cultural identity:
  - Ask patients about their beliefs, instead of assuming that because they are Latino, they believe in *fatalismo* (fatalism), for instance. A Latino patient may still report a belief in *fatalismo*, but the physician must model how to inquire about each patient’s belief system, regardless of patient’s race/culture.
  - If instructions are offered, provide evidence that this assumption-based approach improves patient care/outcomes.
    - Good example: A patient self-identifies as a queer female teenager, so the physician asks for the patient’s preferred gender pronouns. Then, evidence is provided that asking this question improves care for LGBTQ teens.
  - All patients, rather than exclusively minority patients, should be asked about their belief systems when relevant.
- [ ] Patients of color and/or minority culture should exhibit a broad variety of healthy and unhealthy behaviors, avoiding exclusively unhealthy, stereotypical behaviors for minority patients:
  - While racial/ethnic health disparities are important to understand, patients of color should not exclusively be depicted with obesity, under-insured status, diabetes, poverty, etc., as this reinforces implicit biases and worsens health outcomes.<sup>1</sup>
  - Good example: A Latino couple brings their 7yo daughter in for DKA. By history, parents are middle-class, born and raised in the U.S., speak only English, exercise, and eat healthy. Health disparities related to DKA are discussed later in the case, but this patient’s HPI does not fall back on cultural stereotypes/ implicit biases, instead adding diversity to our portrayal of Latino families. Furthermore, the didactic content on DKA is not impacted by this revision (Revised from Pediatrics, Case 16).
- [ ] Foster critical consciousness whenever assumptions are made about patients based on racial/ cultural identity:
  - Good example: Medical student interviews RR, a black female with obesity. In his oral presentation, he suggests helping RR get food stamps so that she can afford healthier food. The physician challenges the student to talk more with RR about her barriers to weight loss, and he learns that instead of access to healthy food (as he had assumed), RR’s biggest barrier to weight loss is her long work hours as a bank executive sitting at a desk.

Case images/ photos:

- Consider any implicit messages that images convey; does the depiction of a patient of color serve as a hint at what is to come later in the case (e.g. that a certain pathology will be discussed, or that a stereotypical set of SDOH will be encountered)?
- Consider re-shooting photographs with a more diverse group of providers/patients/students, or finding more diverse open source Google images.

Provide the evidence:

- Literature is cited for health disparities that do exist for pathologies discussed in the case, regardless of this particular patient's race/culture, with brief discussion of structural/ upstream factors.
- Links/references are offered to evidence the potential for medical harm that arises when assumptions are made about patients based on their perceived race/culture.

**Rationale and evidence for case edits:**

- Students must be exposed to alternative portrayals of minority patients that move beyond reductionist views and exemplify the diversity within minority groups.
- Medical education must minimize essentialism.<sup>2</sup>
- Structural competency skills are best learned when demonstrated in practice. The structural context in which patients live should be incorporated into the disease narrative as this may expose a modifiable risk factor, different from those associated with the patient's stereotype.
- Race in and of itself is not necessarily a biological risk factor. However, the social context of *racism* can be a risk factor, which has led to certain health behaviors, disease prevalence, and health outcomes being commonly associated with certain races and cultures.<sup>3</sup>
- While it is critical to learn how to understand, model empathy, and effectively communicate with people of different races and cultures, these provider-patient communication tactics should be taught and practiced because they are medically relevant and lead to improved health outcomes, not because a patient is a member of a racial/cultural group for which stereotypes exist (i.e. the same questions regarding patients' health beliefs can and should theoretically be used for minority and non-minority races and cultures).<sup>4</sup>

**References**

1. Acquaviva KD, Mintz M. Perspective: Are we teaching racial profiling? The dangers of subjective determinations of race and ethnicity in case presentations. *Academic Medicine*. 2010;85(4):702-5.
2. Kumas-Tan Z, Beagan B, Loppie C, MacLeod A, Frank B. Measures of cultural competence: Examining hidden assumptions. *Academic Medicine*. 2007;82(6):548-57.
3. Metz J, Roberts DE. Structural competency meets structural racism: Race, politics, and the structure of medical knowledge. *Virtual Mentor*. 2014;16(9):674-690.
4. Wear D. Insurgent multiculturalism: Rethinking how and why we teach culture in medical education. *Academic Medicine*. 2003;78(6):549-54.

**Section 4. Treatment plan should include addressing patients' SDOH.**

**Does your case include:**

A patient and a health care provider?

**Suggested case edits:**

Provider demonstrates personal responsibility for addressing SDOH at least once in the

Assessment and Plan when social context risk factors are identified, other than referrals to other disciplines such as social work:

- **Good short-term examples:**
  - Food bank referral
  - Bus pass
  - Directions to homeless shelter
  - If low health literacy, visual (e.g. whiteboard) education offered +/- reading/writing assistance
  - Connection to local or online support group
  - Other local resources suggested
- **Good long-term examples:**
  - Provider supports student idea to restructure the clinic schedule to improve access (e.g. create more drop-in/ evening hours).
  - Student research/ quality improvement project suggested and encouraged at clinic or in community.
  - Partnership with community based organization and future collaborative community events are considered.
- **Good individual patient-level examples:**
  - Provider explicitly practices trauma-informed care, uses non-judgmental language, and respects patient autonomy.
  - Provider calls drug or insurance company to get cheaper drug price for patient.
  - Provider requests in-person interpreter for next appointment.
- **Good population-level examples:**
  - Provider encourages student to write letter to representative, participate in government lobby day, or get involved with relevant non-profit organization.

[ ] Hopelessness/ futility in addressing SSDOH is called out and explicitly mitigated:

- **Good example:** Provider acknowledges the challenges of this work and emphasizes the need for creativity given no established treatment algorithms.
- **Good example:** If student expresses hopelessness about SSDOH, provider responds with optimism and solutions.
- Remove text that express a sense of futility in addressing SSDOH.
- **Good example:** Removal of text: “You feel uncomfortable with him going back to the streets after this life-threatening illness, but it becomes clear that there is no alternative“ (Internal Medicine, Case 26).

[ ] Provider models interdisciplinary team care at least once in the case.

- Provider refers patient to interdisciplinary team, engages in conversation with other health professionals, and does not defer all responsibility for addressing SSDOH to other team members.
- Interdisciplinary team care is modeled as a structural tool for addressing SSDOH.
- **Good example:** Demonstrate conversations between providers and other health professionals, such as nurses, social work, physical therapists, and behavioral counselors that depict multiple professions working towards the same ultimate goal.

[ ] Provider is an active community advocate.

- **Good example:** Dr. Lee says “school food is so unhealthy” (Family Medicine, Case 21) and describes advocating for removal of vending machines from grade schools.

[ ] Provide the evidence:

- Literature is cited for why addressing SSSDOH in the Assessment and Plan is necessary to improve patient outcomes.
- Literature is cited to provide evidence regarding successful interventions used in similar situations.
- Literature is cited to provide evidence that a team-based approach leads to improved patient outcomes, quality and satisfaction in case, fewer adverse events, and solutions to SSSDOH.

[ ] Website links to resources are provided.

- Links to national organizations, NGOs, and community-based organizations that have modeled structural competency interventions in practice
- Good example: Health Leads (<https://healthleadsusa.org/>)

#### **Rationale and evidence for case edits:**

- It is critical to model the role of a physician in addressing SSSDOH and demonstrate that interventions can occur in both inpatient and outpatient settings across all specialties. Medical education must normalize the inclusion of a physician plan to address SSSDOH within the patient's management plan.
- Action plans must target both individual and population health for improved patient outcomes. An action plan includes concrete, tangible steps that can be carried out by the interdisciplinary health care team.<sup>1</sup>
- Cases must encourage students to ask questions about upstream context by showing that something can be done about it, and demonstrate that physicians should care about social factors because of the role they play in health outcomes.
- Cases should empower medical students to innovate and address SSSDOH in creative ways.
- Modeling interdisciplinary teamwork counters the "silo effect" by enhancing communication between different disciplines and thus reduces adverse events (e.g. morbidity/mortality) while improving patient outcomes and patient and health care worker satisfaction.<sup>2</sup>
- Model interdisciplinary teamwork prepares students for this in the real-world setting.

#### **References**

1. Hansen H, Metz J. Structural competency in the US healthcare crisis: Putting social and policy interventions into clinical practice. *Journal of Bioethical Inquiry*. 2016;13(2):179-83.
2. Epstein NE. Multidisciplinary in-hospital teams improve patient outcomes: A review. *Surg Neurol Int*. 2014;5(Suppl 7):S295-303.

#### **Section 5. Cases discuss implicit bias and critically reflect on racial/ cultural disparities.**

#### **Does your case include:**

- [ ] A provider, medical student, or patient of different races, cultures, or socioeconomic backgrounds from each other?
- [ ] Provider saying something racially/culturally insensitive or biased?
- [ ] Discussion of bias in health care?
- [ ] Sensitive or controversial topic(s) covered (e.g. substance use disorders, STI)?

### Suggested case edits:

- [ ] Case critically analyzes the norms and practices of being a physician:
  - Mention unequal power dynamics inherent in physician-patient relationship, and intersection of this hierarchical structure with race/cultural inequality.
  - Provide examples of misuse of physician power (e.g. Tuskegee/ Guatemala syphilis), when appropriate.
  - Good example: Provider acknowledges own biases instead of suppressing them, and offers student tools for how to do this (as well as evidence for its benefits).
  
- [ ] Provider models skill of ownership of implicit biases and critical self-reflection:
  - Acknowledges that all health care providers display implicit biases toward patients. This does not mean we are bad people, but it does mean we must work to improve our self-awareness and critical consciousness.
  - Define and give examples of microaggressions in health care.
  - Good example: Provider initiates a discussion with student on his personal value judgments attached to substance use disorder (SUD), and how he is working on self-awareness to create better partnerships with SUD patients. Provider also mentions the impact of bias against SUD patients on clinic policies/structural level (e.g. clinic policy used to not allow patients to restart suboxone if they relapsed. Now it does, because relapse was identified as part of natural history of SUD).
  - Provide resources and cite evidence that this works and improves outcomes
  
- [ ] Identify areas where different values or worldviews between providers and patients may come into tension and where they may achieve synergy:
  - Good example: Patient says he doesn't want to be treated by resident AA because she is black. Attending models appropriate intervention by explaining to patient that AA is one of the best residents we have and that he would trust AA with his own life. Attending debriefs with AA and the medical student afterwards, and ensures wellness resources are provided.
  - Provide resources and cite evidence that this works and improves outcomes.

### Rationale and evidence for case edits:

- Evidence indicates that health care professionals exhibit the same levels of implicit bias as the wider population, and doctors hold stereotypes based on patients' race that can influence their clinical decisions and judgement of that stereotyped group. For example, although explicit race bias is rare among physicians, an unconscious preference for whites as compared with blacks is commonly revealed on tests of implicit bias.<sup>1</sup>
- Implicit biases are likely to negatively influence diagnosis and treatment decisions and levels of care in most, and likely, all circumstances. The Institute of Medicine found "strong but circumstantial evidence for the role of bias, stereotyping, and prejudice" in perpetuating racial health disparities.<sup>2</sup>
- Implicit racial bias (and microaggressions) contribute to disparities in medical education and institutions.<sup>3,4</sup>
- To address health disparities, medical education must foster critical consciousness, which engages students and prepares future physicians to critically examine experiences, manage interpersonal dynamics, and structurally contextualize patient encounters.<sup>5,6</sup>
- Addressing implicit biases in health care may improve patient outcomes.<sup>7,8</sup>

## References

1. FitzGerald C, Hurst S. Implicit bias in healthcare professionals: A systematic review. *BMC Medical Ethics*. 2017;18(1):19.
2. Ansell DA, McDonald EK. Bias, black lives, and academic medicine. *New England Journal of Medicine*. 2015;372(12):1087-9.
3. Stone J, Moskowitz GB. Nonconscious bias in medical decision making: What can be done to reduce it? *Medical Education*. 2011;45(8):768-76.
4. University of Minnesota School of Public Health. Examples of racial microaggressions. <https://waraceequityandjustice.files.wordpress.com/2015/12/microaggressions.pdf>. Accessed November 28, 2018.
5. Dao DK, Goss AL, Hoekzema AS, Kelly LA, et al. Integrating theory, content, and method to foster critical consciousness in medical students: A comprehensive model for cultural competence training. *Academic Medicine*. 2017;92(3):335-44.
6. Jernigan VB, Hearod JB, Tran K, Norris KC, Buchwald D. An examination of cultural competence training in US medical education guided by the tool for assessing cultural competence training. *Journal of Health Disparities Research and Practice*. 2016;9(3):150-67.
7. Hall WJ, Chapman MV, Lee KM, et al. Implicit racial/ethnic bias among health care professionals and its influence on health care outcomes: A systematic review. *Am J Public Health*. 2015;105(12):e60-76.
8. Blair IV, Steiner JF, Havranek EP. Unconscious (implicit) bias and health disparities: Where do we go from here? *The Permanente Journal*. 2011;15(2):71-8.

**Section 6.** Cases include a diverse range of patient, provider, and medical student identities and health professional roles, which reflect nationwide sociodemographic statistics.

## Suggested case edits:

[ ] Wide diversity of patients, providers and medical students are represented across cases, including:

- Non-white race/ethnicity, with close attention to underrepresented minorities in science and medicine
- Multiracial couples
- Religious beliefs/traditional dress
- Non-binary gender identity
- Same-sex couples
- Diversity of national origin, language fluency
- Disability
- Urban/rural
- Veteran status
- Family status/pregnancy

## Rationale and evidence for case edits:

- People of color remain underrepresented in U.S. medical schools and this lack of diversity extends to the physician workforce, although years of evidence has suggested that medical student and health care workforce diversity improves quality of care and access to care for minority patients.<sup>1,2</sup>
- Current medical texts that are commonly used across medical schools often have disproportionate racial representation, and racial minorities are still absent at this topic level or continue to portray the lack of diversity in medicine. These omissions result in racial and ethnic bias in medical care for underserved minority populations and may also have negative impacts on students of color.<sup>3,4</sup>
- Despite the current lack of diversity in medical schools and the physician workforce, medical school curricula should reflect the nation's diverse racial and ethnic composition as this increases feelings of safety, inclusion acceptance and overall wellness for underrepresented minority students.<sup>4,5</sup>

- Low workforce diversity has also been associated with increased burnout and decreased personal satisfaction among students and physicians of color.<sup>2,6</sup>

#### References

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