

NCC Pediatrics Continuity Clinic Curriculum: **Disparities in Health Care**



Goals & Objectives:

Upon completion of this module, the learner should be able to:

- a. Understand the difference between health disparities and health equity, and the implications for both on research, policy and practice
- b. Describe examples of health disparities within various populations
- c. Discuss efforts and resources to address health inequities in pediatrics and/or the military population

Pre-Meeting Preparation:

Please read/review the following:

- "The Influence of Implicit Bias on Treatment Recommendations for 4 Common Pediatric Conditions: Pain, Urinary Tract Infection, Attention Deficit Hyperactivity Disorder, and Asthma." Sabin JA and Greenwald AG. *Am J Public Health* 2012;102:988-995.
- "The Impact of Unconscious Bias in Healthcare: How to Recognize and Mitigate It." Marcelin JR, Siraj DS, Victor R, Kotadia S, and Maldonado YA. *J Infect Dis* 2019;220:S62-S73.
- "Child Health Disparities: What Can a Clinician Do?" Cheng TL, Emmanuel MA, Levy DJ, and Jenkins RR. *Pediatrics* 2015;136;961.

Conference Agenda:

- Discuss cases
- Review "Being An Active Bystander" handout from The OSU Kirwan Institute for the Study of Race and Ethnicity
- Review quiz questions

Extra Credit:

- Take an Implicit Association Test
- Watch the <u>"The Neuroscience of Decision-Making: Are We Foul or Fair?"</u> TED Talk by Kimberly Papillion, Esq.
- Complete The OSU Kirwan Institute Implicit Bias Module Series
- Kaiser Family Foundation Racial Equity and Health Policy page
- 2021 Kids Count Data Book (Annie E. Casey Foundation)

The Influence of Implicit Bias on Treatment Recommendations for 4 Common Pediatric Conditions: Pain, Urinary Tract Infection, Attention Deficit Hyperactivity Disorder, and Asthma

Janice A. Sabin, PhD, MSW, and Anthony G. Greenwald, PhD

Management of asthma, attention deficit hyperactivity disorder (ADHD), urinary tract infection (UTI), and pain are common conditions routinely treated by pediatricians. The childhood prevalence of asthma, the most common chronic pediatric illness, is 10% (n = 7 million), with 8% of White children, 8% of Hispanic children, and 17% of non-Hispanic Black children currently diagnosed with asthma.1 African American children experience the highest rates of asthma hospitalization and asthma mortality relative to other racial and ethnic groups, and this disparity is widening.² ADHD is diagnosed in 4.1% of all children, with the greatest prevalence among White children (5.1%). However, among male children, prevalence of ADHD by race is 3% for Hispanics, 4.3% for Whites, and 5.65% for African Americans.³ A meta-analysis to determine prevalence of UTI in children found that UTIs accounted for 5% to 14% of all pediatric emergency room visits annually and for 7% of infants presenting with fevers.⁴

Racial and ethnic disparities are found in asthma care, medication use for ADHD, children's timely and appropriate receipt of medication, pain management, and quality of primary care.^{2,5-8} For asthma, the rate of emergency department visits is 3 times higher for minority children than for nonminority children and use of daily anti-inflammatory medication is lower.⁹ African American and Hispanic children are more likely to have a potentially avoidable asthma hospitalization.9 African American and Hispanic children with asthma in the Military Health System are less likely to see a specialist than White children with asthma, 9 even though specialist care for asthma is more likely than primary care to follow recommended guidelines. 10 Minority children have lower likelihood of receiving a diagnosis of ADHD and of receiving any

Objectives. We examined the association between pediatricians' attitudes about race and treatment recommendations by patients' race.

Methods. We conducted an online survey of academic pediatricians (n = 86). We used 3 Implicit Association Tests to measure implicit attitudes and stereotypes about race. Dependent variables were recommendations for pain management, urinary tract infections, attention deficit hyperactivity disorder, and asthma, measured by case vignettes. We used correlational analysis to assess associations among measures and hierarchical multiple regression to measure the interactive effect of the attitude measures and patients' race on treatment recommendations.

Results. Pediatricians' implicit (unconscious) attitudes and stereotypes were associated with treatment recommendations. The association between unconscious bias and patient's race was statistically significant for prescribing a narcotic medication for pain following surgery. As pediatricians' implicit pro-White bias increased, prescribing narcotic medication decreased for African American patients but not for the White patients. Self-reported attitudes about race were associated with some treatment recommendations.

Conclusions. Pediatricians' implicit attitudes about race affect pain management. There is a need to better understand the influence of physicians' unconscious beliefs about race on pain and other areas of care. (*Am J Public Health*. 2012;102:988–995. doi:10.2105/AJPH.2011.300621)

medication for ADHD.¹¹ For the current research, we adopted the following National Institutes of Health definition of "race" (derived from a more detailed definition by the National Research Council):

a continuously evolving social construct used to categorize individuals into groups that have typically been based on the physical characteristics (e.g. skin color, hair texture or other distinctive characteristics, etc.) of an individual or their ancestors.¹²

We used the following Institute of Medicine definition of "ethnicity": "a concept referring to a shared culture and way of life." ^{5(p523)}

Pain management is an area in which racial and ethnic disparities are well documented and persist. 8,13 In a national study of hospital emergency departments that measured pain medication–prescribing patterns over a 13-year period (1993–2005), White patients were

more likely to receive an opioid analgesic than African American, Hispanic, or Asian patients. Differential treatment, which was found among adults and children for all types of pain, was greater as severity of pain increased, and the disparities did not decrease over time. Compared with research on adult pain, there is less research on racial and ethnic disparities in pain management for children, although pain is generally undertreated in children. One study in a pediatric hospital setting showed that Latino children received 30% less opioid analgesics than did White children for early postoperative pain.

It is not uncommon for minority patients or parents to report discrimination in health care. 15-20 Parents of minority children report lower scores on interpersonal relationship with primary care providers, lower scores for provider communication, and less participatory

decision-making.² Patient perceptions and experiences of discrimination in health care can cause delay in timely treatment, an interruption in continuity of care, and mistrust and avoidance of the health care system.^{20,21} A study of physician behavior in real-world clinical interactions with adults found that, compared with White patients, physicians spend less time with African American patients, are more verbally dominant, and show a less positive affect.²²

The Institute of Medicine report Unequal Treatment (2003) found that "bias, stereotyping, prejudice, and clinical uncertainty on the part of healthcare providers may contribute to racial and ethnic disparities in healthcare."5(12) Social psychologists and the Institute of Medicine speculate that providers' explicit and implicit attitudes and beliefs may subtly and unintentionally contribute to disparities.^{5,23,24} Explicit attitudes are ones we know we have and can report to others.²⁵ Implicit refers to attitudes that are outside of awareness, are not available to report, and are thus considered "unconscious." ²⁵ Implicit attitudes and stereotypes can exist even among individuals who endorse egalitarian beliefs.²⁶⁻²⁹ Explicit and implicit attitudes and stereotypes are often only weakly related. 29-32 In the more affective dimensions of social interactions such as nonverbal behavior, implicit attitudes and stereotypes about race are more closely related to the behavior of prejudice and discrimination than is self-report. 33,34 The existence of implicit bias in an individual does not always result in discrimination, but because implicit attitudes and beliefs are unrecognized and unintentional, these biases may subtly affect behavior.

We are extending our previous work that reported on the strength of pediatricians' implicit and explicit attitudes and beliefs about race and their association with the difference between optimal care and "adequate" or good enough care.³⁵ In this study, we examined pediatricians' implicit and explicit attitudes and beliefs about race and their association with each treatment recommendation for 4 conditions that are routinely seen in pediatric practice: asthma, ADHD, UTI, and pain. We expected that physicians' self-reported attitudes and beliefs about race would be related to treatment recommendations. We hypothesized that we would find an association between strength of physicians' implicit pro-White

attitudes and stereotypes about race and treatment recommendations by patients' race.

METHODS

We collected data for this study in September and October 2005 using a single-session online survey of pediatricians. We recruited pediatricians from one department at a large, urban research university. We invited all faculty, residents, and fellows to participate in the study. Participants practice in primary care, ambulatory, and acute care settings. We implemented the survey on the *Project Implicit* Web servers at Harvard University.

Measures

Case vignettes. To explore the association of physicians' attitudes and stereotypes about race with treatment options for asthma, UTI, ADHD, and pain, we designed 4 pediatric case vignettes using scenarios that this sample of pediatricians would likely encounter in their own clinical practice. Case vignettes are considered a valid method to measure quality of care. 36,37 They have been shown to compare favorably to the research "gold standard" of using standardized patients to measure quality of care.36 Patients were male in 2 of the cases (pain and ADHD) and female (UTI and asthma) in 2 cases. Each vignette had 2 versions; 1 version of each case was of an African American patient and 1 version was of a White patient. Each participant randomly received 2 vignettes in which the patient was described as African American and 2 in which the patient was described as White, but never the same vignette with both race variations.

The case vignettes were written by a senior faculty pediatrician and used in this study for the first time (Figure A, available as a supplement to the online version of this article at http://www.ajph.org). Each case vignette was purposefully designed to contain some degree of clinical uncertainty. Uncertainty is one factor known to contribute to bias in medical decisionmaking, 14,38,39 The case vignettes focused on primary care referral versus specialist referral for an 8-year-old female patient with an acute asthma exacerbation following an emergency department visit and 2 prior hospitalizations, inpatient versus outpatient management of a 6-week-old female patient with a UTI, treatment of

a 9-year-old male patient diagnosed with ADHD, and pain management for a 14-year-old male patient after discharge following open reduction and internal fixation of a femur fracture. Treatment options for each case were designed to represent best practice versus "adequate" or good enough care so that subtle differences in quality could be assessed. Participants responded to each treatment option in each case using a 5-item scale:

- 1. "I strongly disagree. This is clearly the wrong treatment option."
- 2. "I disagree. This is the wrong treatment option."
- 3. "I neither agree nor disagree with this treatment option."
- 4. "I agree. This is a good treatment option."
- 5. "I strongly agree. This is clearly a good treatment option."

Explicit attitudes and stereotypes. We used the following 2 "feelings" items: (1) "My feelings toward African Americans are ...," and (2) "My feelings toward European Americans are " (Answer options ranged from 0 = cold to 10 =warm.) We asked participants to respond to 4 additional explicit questions that related in topic to the implicit measures. For these 4 questions, answers ranged from 1 to 7 (1 = African)Americans are more likely; 4 = African Americans and European Americans are equally likely; 7 = European Americans are more likely). A previous report of frequency of responses to these questions showed no statistically significant difference between "warm feelings" for European Americans and African Americans.35 However, 76% reported that in their own practice, African Americans were likely to be more "compliant" and 86% associated the concept of "receiving preferred medical care" with African American patients.35

Implicit attitudes and stereotypes. The Implicit Association Test (IAT) is a widely used, indirect measure of implicit social cognition. ⁴⁰ It is a timed cognitive test used to measure the relative strength between positive and negative associations toward one social group compared with another, such as African Americans and European Americans and "good" and "bad" (Figure B, available as a supplement to the online version of this article at http://www.aiph.org). Test takers are asked to sort and

group facial images of the target concept (African American faces and European American faces) and words that represent "good" or "bad." The difference in time taken to sort and group these images with value-laden concepts reflects the ease of automatic association. There is often a difference observed between implicit attitudes about race measured by the IAT and self-reported or explicit attitudes and stereotypes about race. 30,32,41 One study shows that in socially sensitive areas, the IAT is more predictive of the behavior of discrimination than is self-report.³⁴ We used 3 IATs to measure pediatricians' implicit attitudes: a Race IAT to measure attitudes about race; a Race-Medical Compliance IAT to measure a stereotype of race and medical compliance; and a Race-Quality of Care IAT to measure a stereotype of race and perceptions of "preferred" (the best or ideal) care versus "adequate" (good enough) care.

All 3 IATs used computer-generated facial images (labeled "African American" and "European American") to represent race. We used words to represent the targeted concepts of good versus bad, compliant patient versus reluctant patient, and preferred versus acceptable medical care. We designed the Race-Medical Compliance IAT³⁵ to assess an automatic association between race and medical compliance using the target categories of race and the concept of compliant patient versus reluctant patient. We designed the Race-Quality of Care IAT³⁵ to assess an automatic association between race and the concept of preferred (ideal) versus acceptable (good enough) medical care. For a detailed description, see online Figure B.

Analysis

For the IATs, we calculated an IAT D score using the standard IAT algorithm. ⁴² The mean IAT D score is a continuous variable that is normally distributed. A positive IAT D score indicates some degree of implicit preference for White relative to African American. To assess effect size, we used Cohen's d, a standardized effect size measure. Cohen's d is interpreted as follows: d of 0.2 = small effect, d of 0.5 = medium effect, and d of 0.80 = large effect. ⁴³ We analyzed the association between physicians' explicit and implicit attitudes and stereotypes about race and each specific treatment option for all 4 case vignettes using

Pearson correlation. We repeated this analysis for physicians' gender. We assessed the interactive effect of explicit and implicit measures and patient's race on each treatment recommendation for each case vignettes. We created a product term for each potential interaction and used hierarchical linear regression analysis to assess whether the 2 variables together predicted treatment recommendations.

RESULTS

The overall response rate was 58% (n = 95), with 53% of the eligible sample completing all measures (n = 86). Seven of the 95 participants dropped out before completing the IATs (n = 88), and 2 more participants dropped out before completing explicit questions, which were presented last. The majority of our sample was female (65%), residents or fellows (59%), and White (82%). We compared those who responded with the complete eligible sample and found that a greater proportion of responders were female (65% vs 51%) and that the proportion of Whites was similar (82% vs 84%).³⁵ Twenty-five percent of respondents reported that, in the last 1 month, their patient population was less than 50% White, 18% reported that it was 50% to 60% White, and 57% reported that it was more than 60% White.

Implicit Measures

We previously reported implicit bias scores for this sample, using mean IAT D scores and Cohen's d to measure effect sizes. This sample of pediatricians, overall, showed weak pro-White implicit bias on the Race IAT (mean IAT D score = 0.18, SD = 0.44, P=.01, Cohen's d = 0.40), a moderate implicit pro-White race and medical compliance stereotype (mean IAT D score = 0.25, SD = 0.42, P=.001, Cohen's d = 0.60), and a moderate implicit association of African Americans rather than White Americans with the concept of "preferred" medical care (mean IAT D score = -0.21, SD = 0.33, P=.001, Cohen's d = -0.64).

Treatment Recommendations for Case Vignettes

A detailed previous report of responses to differences by patient race between optimal care and adequate care for the case vignettes showed no statistically significant difference,

except for UTI, in which case the White patient was more likely to remain hospitalized.³⁵ We conducted further analyses of physicians' attitudes and stereotypes and physicians' response to each individual treatment recommendation on all 4 case vignettes (Table 1). We found that for pain management and treatment of UTI, physicians most often chose the optimal treatment recommendation. For ADHD, most physicians favored 2 of the options: (1) an individual education program and long-acting Ritalin (75% agreed with this option), which is the optimal recommendation, and (2) an individual education program and behavioral intervention (85% agreed), which is not the best option. For asthma, the majority of physicians did not agree with a referral to the pulmonary clinic (44% agreed), although this was indicated. The majority chose to refer the patient back to primary care (77% agreed).

We expected that self-reported attitudes and stereotypes about race would be associated with treatment recommendations for each case. However, we found no significant relationship between any self-reported measures and

TABLE 1—Physicians' Agreement With Treatment Recommendations for 4 Common Pediatric Conditions: University of Washington Physician Survey 2005, United States, September–October 2005

Treatment	No. (%)	
Pain control		
Oxycodone for 5 more da	47 (50)	
Ibuprofen	11 (12)	
Management of UTI		
Home ^a	60 (65)	
Inpatient	31 (33)	
ADHD		
IEP + long-acting Ritalin ^a	70 (75)	
IEP + behavioral intervention	79 (85)	
IEP + short-acting Ritalin	23 (25)	
Asthma control		
Refer to pulmonary clinic ^a	41 (44)	
Refer back to primary care physician	72 (77)	

Note. AHDH = attention deficit hyperactivity disorder; IEP = individual education program; UTI = urinary tract infection. Physicians (n = 95) gave a response to each option.

^aThe recommended ideal treatment.

treatment of pain and UTI for African American patients (results not shown). Pediatricians who reported that White patients rather than African American patients were generally more medically compliant were more likely to agree with prescribing a narcotic medication for pain for the White patient but not the African American patient. For the White patient, the measure of "warm feelings" for European Americans was significantly positively related to the nonpharmacologic treatment of ADHD and for referring the asthma patient back to the

primary care physician rather than to the pulmonary clinic. Neither option is optimal care. "Warm feelings" for African American patients were not associated with treatment recommendations.

We hypothesized that implicit attitudes and stereotypes about race would be associated with treatment recommendations. There were no significant associations between implicit attitudes and stereotypes about race and any of the treatment recommendation options for UTI, ADHD, and asthma (Table 2). For pain,

participants with greater implicit pro-White bias were more likely to agree with prescribing a narcotic medication for postsurgical pain for the White patient but more likely to disagree with prescribing it for the African American patient. Physicians who demonstrated stronger pro-White bias on the Race IAT were more likely to agree with prescribing ibuprofen for the White patient (not the best option), but no significant association was found for the African American patient. For pain management, we found a significant correlation between

TABLE 2—Intercorrelations of Measures of Physicians' Implicit Racial Bias and Treatment Recommendations, by Patient's Race: University of Washington Physician Survey 2005, September-October 2005.

Treatment Recommendations	Race IAT $(n = 43)$	Race-Medical Compliance IAT (n = 88)	Race-Quality of Care IAT (n = 45
	African A	merican Patients	
Pain			
Give oxycodone ^a	-0.38*	-0.11	0.04
Give ibuprofen	0.22	0.23	-0.30
Urinary tract infection			
Treat as outpatient ^a	-0.15	0.04	-0.07
Treat as inpatient	0.27	0.20	-0.24
Attention deficit hyperactivity disorder			
IEP + long-acting Ritalin ^a	0.49	0.04	-0.21
Behavioral intervention + short-acting Ritalin	0.27	-0.18	0.03
Behavioral intervention + IEP	0.14	0.06	0.32
Asthma			
Refer to pulmonary clinic ^a	-0.10	0.16	0.43
Refer back to primary care physician	0.43	0.01	-0.17
	Whi	te Patients	
Pain			
Give oxycodone ^a	0.47	0.37*	0.67**
Give ibuprofen	0.61*	0.08	-0.31
Urinary tract infection			
Treat as outpatient ^a	-0.12	-0.14	-0.06
Treat as inpatient	-0.12	0.07	0.49
Attention deficit hyperactivity disorder			
IEP + long-acting Ritalin ^a	-0.38	0.11	-0.14
Behavioral intervention + short-acting Ritalin	0.27	0.08	0.11
Behavioral intervention + IEP	0.01	-0.01	0.03
Asthma			
Refer to pulmonary clinic ^a	-0.04	-0.09	-0.09
Refer back to primary care physician	0.31	-0.11	0.19

Note. IAT = Implicit Association Test; IEP = individual education program. Intercorrelations are Pearson correlation coefficients. The numbers of patients by race and treatment recommendation are as follows. For African American patients, treatment for pain and urinary tract infection, n = 27 for Race IAT, n = 57 for Race-Medical Compliance IAT, n = 30 for Race-Quality of Care IAT; treatment for attention deficit hyperactivity disorder and asthma, n = 15 for Race-Medical Compliance IAT, n = 15 for Race-Quality of Care IAT; treatment for pain and urinary tract infection, n = 15 for Race-IAT, n = 30 for Race-Medical Compliance IAT, n = 15 for Race-Quality of Care IAT; treatment for attention deficit hyperactivity disorder and asthma, n = 27 for Race-IAT, n = 56 for Race-Medical Compliance IAT, n = 29 for Race-Quality of Care IAT.

^aThe recommended ideal treatment.

^{*}P = .05; **P = .01.

physician female gender and the willingness to prescribe a narcotic pain medication for the White patient, but not for the African American patient (results not shown).

We examined the interactive effect or joint association of implicit attitudes about race, implicit stereotypes about race-medical compliance, implicit beliefs about "preferred care," and patient's race on treatment recommendations. There were no significant joint associations between patient's race and implicit measures on treatment for UTI and asthma. We found a statistically significant association between patient's race and implicit race bias on treatment of ADHD. Stronger implicit pro-White bias was associated with recommending an individual education program and longacting Ritalin (the best option) for both the White patient and the African American patient (not shown). We found a statistically significant joint association of pediatricians' implicit biases and patient race on pain management (Figure 1). For management of pain, physicians with low pro-White implicit race bias agreed with the recommendation of 5 more days of oxycodone for the African American patient (the best option), and physicians with high implicit race bias did not agree.

DISCUSSION

We expected that physicians' self-reported positive attitudes and beliefs about race would be associated with recommending the best treatment option for the African American patient and the White patient. Most pediatricians reported "warm feelings" for both White Americans and African Americans. We found that physicians' self-reported attitudes about race (warm feelings and medical compliance) were associated with agreeing with recommendations for the White patient that are not the recommended guidelines for treatment. 10,44 This is an area that warrants further exploration.

On the basis of previous research, we expected that physicians' implicit pro-White biases might be related to poorer quality of care for an African American patient than for a White patient. With the exception of pain management, we found no significant correlation between implicit measures and treatment recommendations. Implicit attitudes and

stereotypes may not influence care for many chronic and acute pediatric conditions. More research is needed that uses representative samples of physicians who serve diverse patient populations to determine the influence of providers' implicit attitudes and stereotypes in a variety of areas of care in which disparities are known to exist. Physicians' gender was associated with prescribing narcotic pain medication for the White patient but not the African American patient. Future research is needed to determine whether and how provider characteristics such as gender and race interact with implicit attitudes and beliefs about race and patient race to influence medical care across a spectrum of chronic and acute conditions.

We chose pain management for 1 case vignette because this is an area with reported disparities, a high level of clinical subjectivity, and reports of clinicians' associations of African Americans with perceptions of opioid misuse. In a study of patients' opioid misuse, providers were more likely to assess African American patients, younger patients, and patients with a history of illicit drug use as likely to have misused prescribed opioids.⁴⁶ However, this perception was not correct; only the patients who had a history of illicit drug use reported opioid misuse. 46 Pain inherently introduces clinical uncertainty into the clinical interaction because it is based on individual subjective report. Clinical uncertainty, a high workload, physician fatigue, and other circumstances that produce cognitive stress lead to bias and error in medical decision-making. 14,38,39,47 These are conditions that physicians routinely encounter in everyday practice. Clinicians are more likely to apply social stereotypes to pain management decisions when the circumstances are complex and when they believe this information is clinically relevant. 48 Our research is the first to show that physicians with more pro-White implicit bias were more ready to prescribe pain medication to White patients than to African American patients. In addition, our study is the first to show a negative joint effect of implicit race biases and patient's race on treatment of pain.

Our study found a surprising positive interaction effect between patient's race and physician's implicit race bias on the guideline recommended treatment of ADHD, but not for the other options of ADHD treatment presented. As physicians' implicit pro-White bias increased, the likelihood of recommending the optimal treatment recommendation (an individual education program and long-acting Ritalin) for the African American patient and the White patient increased. We speculate that there is an unknown variable to account for this finding. The influence of providers' implicit attitudes about race on treatment of ADHD is an area in need of further study.

Implicit attitudes are related to affective dimensions of behavior such as nonverbal friendliness.33 Development and evaluation of educational programs that target improvements in the more affective dimensions of communication and clinical behavior may contribute to reducing disparities in care. Many African American patients perceive discrimination in health care, and those who perceive it prefer a physician of their own race/ethnicity. 49 However, African Americans and other minorities continue to be underrepresented in the physician workforce.⁴⁹ One study found that African American physicians show no implicit racial bias for either Whites or African Americans.²⁹ Increasing diversity in the physician workforce may help decrease the effects of implicit bias in health care through increasing the opportunity for patient-provider concordance and increasing the likelihood that all patients interact with unbiased providers.

Limitations

There are several limitations of this study. First, as previously reported, the response rate for completing all measures in our survey was 53%. We do not know whether the response rate had an effect on our results. In addition, female physicians were overrepresented relative to the eligible sample.³⁵ Research shows that female physicians hold less implicit race bias than male physicians, 29 and because most of our respondents were female, our results may be an underestimation of the influence of implicit bias on treatment. Second, an important limitation of our study is that we were unable to explore the interaction of physician's gender, race, and implicit attitudes and stereotypes and of patient's race on treatment because of the small sample size. Third, our findings are not generalizable because of the small, nonrepresentative sample of pediatricians who participated in the study. Finally, rather than assessing real-world quality

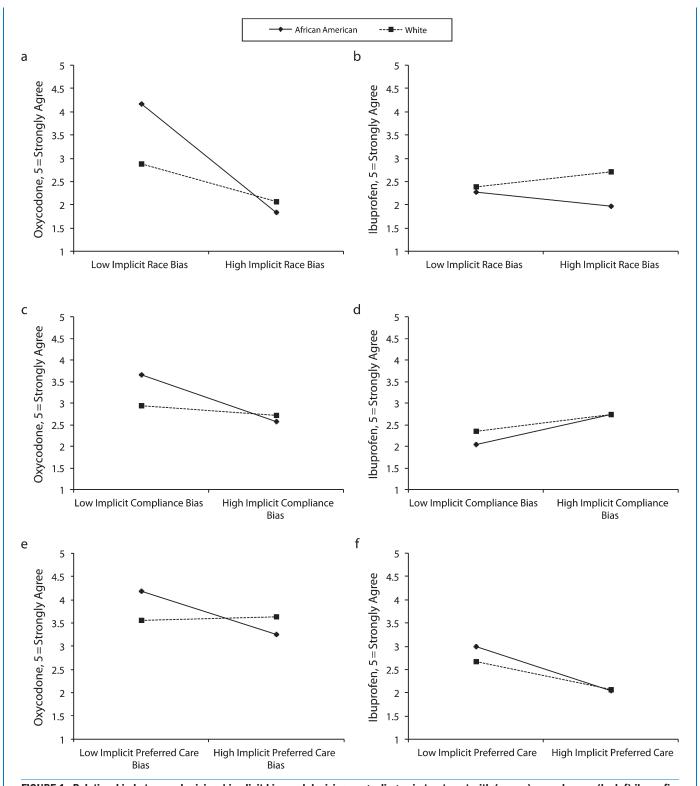


FIGURE 1—Relationship between physicians' implicit bias and decisions regarding pain treatment with (a, c, e) oxycodone or (b, d, f) ibuprofin, by race of the patient: University of Washington Physician Survey 2005, September-October 2005.

of care, our study presented treatment recommendations using case vignettes, which may not represent how this sample of pediatricians would actually deliver care. Despite these limitations, our study provides the first evidence in support of the hypothesis that provider's implicit attitudes about race may have a negative influence in some areas of pediatric care.

Conclusions

Implicit bias is a common social pheneomon,^{27,35} but its influence on clinical practice can be managed. Acknowledging one's own biases and stereotypes about race may help to manage the influence of implicit biases on clinical practice. When clinicians become aware of areas in which they hold implicit bias and situations in which biases are likely to be activated, they can be more purposeful in decision-making. Methods to manage the effects of implicit bias on medical care include placing greater emphasis on adhering to clinical guidelines, using objective decision tools, instituting team-based care in which decisionmaking is shared, and improving clinicians' patient- and family-centered communication skills. Organizational auditing of disparities in care can identify areas in which implicit bias may be affecting clinical care.

Incorporating the evidence of the science of unconscious bias, self-assessment, and communication skills enhancement into medical education, continuing medical education, education for nurses, public health practitioners, and other health care providers and evaluating the impact of this education on clinical care is one approach to reducing health disparities.

About the Authors

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This article was accepted December 5, 2011.

Contributors

J. A. Sabin led the writing of the article. Both authors contributed to the conceptualization of the research, analysis of the data, interpretation of the results, and writing of the article, and approved the final version of the article.

Acknowledgments

This work was supported in part by the Agency for Healthcare Research and Quality (grant 1-R36HS1576-01), the National Institute of Mental Health (pre-doctoral training grant T32MH20010), and a University of Washington Magnuson Health Scholars Award.

A summary of a portion of this research was presented in a poster presentation entitled "Pediatricians' Implicit Attitudes and Stereotypes About Race and Pain Management Recommendations for African American and White Patients," presented at the conference Science of Research on Discrimination and Health; February 2–4, 2011; National Institutes of Health, Bethesda, MD.

We thank Fredric Wolf, PhD, chair, Department of Medical Education and Biomedical Informatics, University of Washington, for his contribution to the conceptual content of this article. We thank Frederick P. Rivara, MD, MPH, professor, Department of Pediatrics, Child Health Institute, University of Washington, and David Takeuchi, PhD, professor, School of Social Work and Department of Sociology, University of Washington, for contributing to the intellectual content of this article.

Human Participation Protection

All aspects of the research were reviewed and approved by the University of Washington human subjects institutional review board.

References

- Bloom B, Cohen RA, Freeman G. Summary health statistics for US children: National Health Interview Survey, 2009. Vital Health Stat 10. 2010;(247):1–82.
- Flores G. Technical report—racial and ethnic disparities in the health and health care of children. Pediatrics. 2010;125(4):e979–e1020.
- 3. Cuffe SP, Moore CG, McKeown RE. Prevalence and correlates of ADHD symptoms in the National Health Interview Survey. *J Atten Disord*. 2005;9(2):392–401.
- 4. Shaikh N, Morone NE, Bost JE, Farrell MH. Prevalence of urinary tract infection in childhood: a meta-analysis. *Pediatr Infect Dis J.* 2008;27(4):302–308.
- Smedley BD, Stith AY, Nelson AR. Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care. Washington, DC: National Academy Press; 2003.
- Brousseau DC, Hoffmann RG, Yauck J, Nattinger AB, Flores G. Disparities for Latino children in the timely receipt of medical care. Ambul Pediatr. 2005;5(6):319–325.
- 7. Jimenez N, Seidel K, Martin LD, Rivara FP, Lynn AM. Perioperative analgesic treatment in Latino and non-Latino pediatric patients. *J Health Care Poor Underserved*. 2010;21(1):229–236.
- 8. Pletcher MJ, Kertesz SG, Kohn MA, Gonzales R. Trends in opioid prescribing by race/ethnicity for patients seeking care in US emergency departments. *JAMA*. 2008;299(1):70–78.
- Stewart KA, Higgins PC, McLaughlin CG, Williams TV, Granger E, Croghan TW. Differences in prevalence, treatment, and outcomes of asthma among a diverse population of children with equal access to care: findings from a study in the military health system. Arch Pediatr Adolesc Med. 2010;164(8):720–726.

- Diette GB, Skinner EA, Nguyen TH, Markson L, Clark BD, Wu AW. Comparison of quality of care by specialist and generalist physicians as usual source of asthma care for children. *Pediatrics*. 2001;108(2):432–437.
- 11. Stevens J, Harman JS, Kelleher KJ. Race/ethnicity and insurance status as factors associated with ADHD treatment patterns. *J Child Adolesc Psychopharmacol*. 2005;15(1):88–96.
- 12. National Institutes of Health. The effect of racial and ethnic discrimination/bias on health care delivery. March 7, 2011. Available at: http://grants.nih.gov/grants/guide/pa-files/PA-11-162.html. Accessed February 9, 2012.
- 13. Shavers VL, Bakos A, Sheppard VB. Race, ethnicity, and pain among the US adult population. *J Health Care Poor Underserved*. 2010;21(1):177–220.
- 14. Tait RC, Chibnall JT, Kalauokalani D. Provider judgments of patients in pain: seeking symptom certainty. *Pain Med.* 2009;10(1):11–34.
- 15. Call KT, McAlpine DD, Johnson PJ, Beebe TJ, McRae JA, Song Y. Barriers to care among American Indians in public health care programs. *Med Care*. 2006;44(6): 595–600
- 16. Ryan AM, Gee GC, Griffith D. The effects of perceived discrimination on diabetes management. J Health Care Poor Underserved. 2008;19(1):149–163.
- 17. Hausmann LR, Jeong K, Bost JE, Ibrahim SA. Perceived discrimination in health care and health status in a racially diverse sample. *Med Care*. 2008;46(9):905–914.
- 18. Casagrande SS, Gary TL, LaVeist TA, Gaskin DJ, Cooper LA. Perceived discrimination and adherence to medical care in a racially integrated community. *J Gen Intern Med.* 2007;22:389–395.
- 19. Street RL, Gordon H, Haidet P. Physician's communication and perceptions of patients: is it how they look, how they talk, or is it just the doctor? *Soc Sci Med.* 2007;65(3):586–598.
- 20. Burgess DJ, Ding Y, Hargreaves M, van Ryn M, Phelan S. The association between perceived discrimination and underutilization of needed medical and mental health care in a multi-ethnic community sample. *J Health Care Poor Underserved.* 2008;19(3):894–911.
- 21. Seattle King County Dept of Public Health. Racial discrimination in health care interview project. Available at: http://www.kingcounty.gov/healthservices/health/news/2001/01012401.aspx. Accessed February 9, 2012.
- 22. Johnson RL, Roter DL, Powe NR, Cooper LA. Patient race/ethnicity and quality of patient–physician communication during medical visits. *Am J Public Health*. 2004;94(12):2084–2090.
- 23. van Ryn M, Fu SS. Paved with good intentions: do public health and human services providers contribute to racial/ethnic disparities in health? *Am J Public Health*. 2003;93(2):248–255.
- 24. Burgess D, van Ryn M, Dovidio J, Saha S. Reducing racial bias among health care providers: lessons from social-cognitive psychology. *J Gen Intern Med.* 2007;22 (6):882–887
- 25. Greenwald AG, Banaji MR. Implicit social cognition: attitudes, self-esteem, and stereotypes. *Psychol Rev.* 1995;102(1):4–27.
- Dovidio J, Gaertner SL. Aversive racism and selection decisions: 1989 and 1999. Psychol Sci. 2000; 11(4):315–319.

- 27. Nosek BA, Smyth FL, Hansen JJ, et al. Pervasiveness and variability of implicit attitudes and stereotypes. *Eur Rev Soc Psychol.* 2007;18(1):36–88.
- 28. Penner LA, Dovidio JF, West TV, Gaertner SL, Albrech TL. Aversive racism and medical interactions with black patients: a field study. *J Exp Soc Psychol.* 2010;46(2):436–440.
- 29. Sabin JA, Nosek BA, Greenwald AG, Rivara FP. Physicians' implicit and explicit attitudes about race by MD race, ethnicity and gender. *J Health Care Poor Underserved.* 2009;20(3):896–913.
- 30. Nosek BA, Greenwald AG, Banaji MR. The Implicit Association Test at age 7: a methodological and conceptual review. In: Bargh JA, ed. *Automatic Processes in Social Thinking and Behavior*. London, UK: Psychology Press; 2007:265–292.
- 31. Dasgupta N, Greenwald AG. On the malleability of automatic attitudes: combating automatic prejudice with images of admired and disliked individuals. *J Pers Soc Psychol.* 2001;81(5):800–814.
- 32. Hofmann W, Gawronski B, Gschwender T, Le H, Schmitt M. A meta-analysis on the correlation between the Implicit Association Test and explicit self-report measures. *Pers Soc Psychol Bull.* 2005;31(10):1369–1385.
- 33. Dovidio JF, Kawakami K, Gaertner SL. Implicit and explicit prejudice and interracial interaction. *J Pers Soc Psychol.* 2002;82(1):62–68.
- 34. Greenwald AG, Poehlman AT, Ulhman E, Banaji MR. Understanding and using the Implicit Association Test, III: meta-analysis of predictive validity. *J Pers Soc Psuchol.* 2009:97(1):17–41.
- 35. Sabin JA, Rivara FP, Greenwald AG. Physician implicit attitudes and stereotypes about race and quality of medical care. *Med Care*. 2008;46(7):678–685.
- 36. Peabody JW, Luck J, Glassman P, et al. Measuring the quality of physician practice by using clinical case vignettes: a prospective validation study. *Ann Intern Med.* 2004;141(10):771–780.
- 37. Peabody JW, Luck J, Glasman P, Dresselhaus TR, Lee M. Comparison of vignettes, standardized patients and chart abstraction: a prospective study of 3 methods for measuring quality. *JAMA*. 2000;283(13):1715–1722.
- Chapman GB, Elstein A. Decision Making in Health Care: Theory, Psychology and Applications. Cambridge, UK: Cambridge University Press; 2000.
- Tversky A, Kahneman D. Judgment under uncertainty: heuristics and biases. *Science*. 1974;185 (4157):1124–1131.
- Greenwald AG, McGhee DE, Schwartz JL. Measuring individual differences in implicit cognition: The Implicit Association Test. J Pers Soc Psychol. 1998;74 (6):1464–1480.
- 41. Greenwald TG, Krieger LH. Implicit bias: scientific foundations. *Calif Law Rev.* 2006;94:945–967.
- 42. Greenwald AG, Nosek BA, Banaji MR. Understanding and using the Implicit Association Test I: an improved scoring algorithm. *J Pers Soc Psychol.* 2003;85(2):197–216.
- Cohen J. Statistical Power Analysis for the Behavioral Sciences. 2nd ed. Hillsdale, NJ: Lawrence Earlbaum Associates: 1988.
- 44. American Academy of Pediatrics. Clinical practice guidelines: treatment of the school-aged child with attention-deficit/hyperactivity disorder. *Pediatrics*. 2001;108(4):1033–1044.

- 45. Green AR, Carney DR, Pallin DJ, Raymond KL, Iezzoni LI, Banaji MR. Implicit bias among physicians and its prediction of thrombolysis decisions for black and white patients. *J Gen Intern Med.* 2007;22:1231–1238.
- 46. Vijayaraghavan M, Penko J, Guzman A, Miaskowski C, Kushel MB. Primary care providers' judgments of opioid analgesic misuse in a community-based cohort of HIV-infected indigent adults. *J Gen Intern Med.* 2011;26 (4):412–418.
- 47. Croskerry P. Achieving quality in clinical decision-making: cognitive strategies and detection of bias. *Acad Emerg Med.* 2002;9(11):1184–1204.
- Burgess DJ, van Ryn M, Crowley-Matoka M, Malat J. Understanding the provider contribution to race/ethnicity disparities in pain management: insights from dual process models of stereotyping. *Pain Med.* 2006;7 (2):119–134.
- Chen FM, Fryer GE, Phillips RL, Wilson E, Pathman DE. Patients' beliefs about racism, preferences for physician race and satisfaction with care. *Ann Fam Med.* 2005;3(2):138–143.







The Impact of Unconscious Bias in Healthcare: How to Recognize and Mitigate It

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The increasing diversity in the US population is reflected in the patients who healthcare professionals treat. Unfortunately, this diversity is not always represented by the demographic characteristics of healthcare professionals themselves. Patients from underrepresented groups in the United States can experience the effects of unintentional cognitive (unconscious) biases that derive from cultural stereotypes in ways that perpetuate health inequities. Unconscious bias can also affect healthcare professionals in many ways, including patient-clinician interactions, hiring and promotion, and their own interprofessional interactions. The strategies described in this article can help us recognize and mitigate unconscious bias and can help create an equitable environment in healthcare, including the field of infectious diseases.

Keywords. Unconscious bias; diversity and inclusion; mitigating strategies.

There is compelling evidence that increasing diversity in the healthcare workforce improves healthcare delivery, especially to underrepresented segments of the population [1, 2]. Although we are familiar with the term "underrepresented minority" (URM), the Association of American Medical Colleges, has coined a similar term, which can be interchangeable: "Underrepresented in medicine means those racial and ethnic populations that are underrepresented in the medical profession relative to their numbers in the general population" [3]. However, this definition does not include other nonracial or ethnic groups that may be underrepresented in medicine, such as lesbian, gay, bisexual, transgender, or questioning/queer (LGBTQ) individuals or persons with disabilities. US census data estimate that the prevalence of African American and Hispanic individuals in the US population is 13% and 18%, respectively [4], while the prevalence of Americans identifying as LGBT was estimated by Gallup in 2017 to be about 4.5% [5]. Yet African American and Hispanic physicians account for a mere 6% and 5%, respectively, of medical school graduates, and account for 3% and 4%, respectively, of full-time medical school faculty [6]. As for LGBTQ medical graduates, the Association of American Medical Colleges does not report their prevalence [6]. Persons with disabilities are estimated to be 8.7% of the general population [4], while the prevalence of physicians with disabilities has been estimated to be a mere 2.7% [7].

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The Journal of Infectious Diseases® 2019;220(S2):S62-73

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Furthermore, although women currently outnumber men in first-year medical school classes [8], gender disparities still exist at higher ranks in women's medical careers [9–11].

Unconscious or implicit bias describes associations or attitudes that reflexively alter our perceptions, thereby affecting behavior, interactions, and decision-making [12–14]. The Institute of Medicine (now the National Academy of Medicine) notes that bias, stereotyping, and prejudice may play an important role in persisting healthcare disparities and that addressing these issues should include recruiting more medical professionals from underrepresented communities [1]. Bias may unconsciously influence the way information about an individual is processed, leading to unintended disparities that have real consequences in medical school admissions, patient care, faculty hiring, promotion, and opportunities for growth (Figure 1). Compared with heterosexual peers, LGBT populations experience disparities in physical and mental health outcomes [15, 16]. Stigma and bias (both conscious and unconscious) projected by medical professionals toward the LGBTQ population play a major role in perpetuating these disparities [17]. Interventions on how to mitigate this bias that draw roots from race/ethnicity or gender bias literature can also be applied to bias toward gender/sexual minorities and other underrepresented groups in medicine.

The specialty of infectious diseases is not free from disparities. Of >11 000 members of the Infectious Diseases Society of America (IDSA), 41% identify as women, 4% identify as African American, 8% identify as Hispanic, and <1% identify as Native American or Pacific Islander (personal communication, Chris Busky, IDSA chief executive officer, 2019). However, IDSA data on members who identify as LGBTQ and members with disabilities are not available.

Glossary of key terms used in discussion of unconscious bias

Active bystander—A person who witnesses a situation, acknowledges the potential problem, and speaks up about it [59]

Bias—Tendency to favor one group over another; biases can be favorable or unfavorable and can be unconscious (implicit or unintentional) or conscious (explicit or intentional) [14]

Cultural humility—Defined by its ongoing self-reflection: a lifelong commitment to continuously evaluate one's own behaviors, beliefs, and identities and determine how potential biases and assumptions may surface when collaborating with an individual of a different background [72]

Intent vs impact—Concept that the focus of behavioral change should consider the impact on the recipient regardless of the *intent* of the offending behavior (ie, whether a result of unconscious or conscious bias) [59]

Microaggression—"Brief and commonplace daily verbal/nonverbal behavioral, and environmental indignities whether intentional or unintentional that communicate hostile, derogatory or negative racial/ethnic, gender, sexual orientation, and religious slights and insults" [73], (p. 271); these can occur wherever people are perceived as "other"; some groups have a lifetime burden of microaggressions that can contribute to physical or psychological illness

Prejudice—Outward expressions of negative attitudes towards different social groups [20]

Stereotype—An oversimplified, fixed, and widely held belief about an entire group of people; stereotypes may not always be accurate, especially when they lead to judgments applied to individuals within that group [14]

Unconscious bias—Attitudes or stereotypes that unconsciously alter our perceptions or understanding of our experiences, thereby affecting behavior, interactions, and decision-making [12–14]

Underrepresented minority—Understood to mean either underrepresented minorities or underrepresented in medicine

Figure 1. Glossary of key terms.

The 2017 IDSA annual compensation survey reports that women earn a lower income than men [18], and a review of the full report demonstrates similar disparities among URM physicians, compared with their white peers [19]. While it may not be feasible to assign a direct causal relationship between unconscious bias and disparities within the infectious diseases specialty, it is reasonable and ethical to attempt to address any potential relationship between the two. In this article,

we define unconscious bias and describe its effect on health-care professionals. We also provide strategies to identify and mitigate unconscious bias at an organizational and individual level, which can be applied in both academic and nonacademic settings.

UNCONSCIOUS BIAS—THE ROLE IT PLAYS AND HOWTO MEASURE IT

Even in 2019, overt racism, misogyny, and transphobia/homophobia continue to influence current events. However, in the decades since the healthcare community has moved toward becoming more egalitarian, overt discrimination in medicine based on gender, race, ethnicity, or other factors have become less conspicuous. Nevertheless, unconscious bias still influences all human interactions [13]. The ability to rapidly categorize every person or thing we encounter is thought to be an evolutionary development to ensure survival; early ancestors needed to decide quickly whether a person, animal, or situation they encountered was likely to be friendly or dangerous [20]. Centuries later, these innate tendencies to categorize everything we encounter is a shortcut that our brains still use.

Stereotypes also inadvertently play a significant role in medical education (Figure 1). Presentation of patients and clinical vignettes often begin with a patient's age, presumed gender, and presumed racial identity. Automatic associations and mnemonics help medical students remember that, on examination, a black child with bone pain may have sickle-cell disease or a white child with recurrent respiratory infections may have cystic fibrosis. These learning associations may be based on true prevalence rates but may not apply to individual patients. Using stereotypes in this fashion may lead to premature closure and missed diagnoses, when clinicians fail to see their patients as more than their perceived demographic characteristics. In the beginning of the human immunodeficiency virus (HIV) epidemic, the high prevalence of HIV among gay men led to initial beliefs that the disease could not be transmitted beyond the gay community. This association hampered the recognition of the disease in women, children, heterosexual men, and blood donor recipients. Furthermore, the fact that white gay men were overrepresented in early reported prevalence data likely led to lack of recognition of the epidemic in communities of color, a fact that is crucial to the demographic characteristics of today's epidemic. Today, there is still no clear solution to learning about the epidemiology of diseases without these imprecise associations, which can impact the rapidity of accurate diagnosis and therapy.

IMPACT OF BIAS ON HEALTHCARE DELIVERY

Unconscious bias describes associations or attitudes that unknowingly alter one's perceptions and therefore often go unrecognized by the individual, whereas conscious bias is an explicit form of bias that is based on one's discriminatory beliefs and

values and can be targeted in nature [14]. While neither form of bias belongs in the healthcare profession, conscious bias actively goes against the very ethos of medical professionals to serve all human beings regardless of identity. Conscious bias has manifested itself in severe forms of abuse within the medical profession. One notable historical example being the Tuskegee syphilis study, in which black men were targeted to determine the effects of untreated, latent syphilis. The Tuskegee study demonstrated how conscious bias, in this case manifested in the form of racism, led to the unethical treatment of black men that continues to have long-lasting effects on health equity and justice in today's society [21]. Given the intentional nature of conscious bias, a different set of tools and a greater length of time are likely required to change one's attitudes and actions. Tackling unconscious bias involves willingness to alter one's behaviors regardless of intent, when the impact of one's biases are uncovered and addressed [22]

There is still debate, however, about the degree to which unconscious bias affects clinician decision-making. In one systematic review on the impact of unconscious bias on healthcare delivery, there was strong evidence demonstrating the prevalence of unconscious bias (encompassing race/ethnicity, gender, socioeconomic status, age, weight, persons living with HIV, disability, and persons who inject drugs) affecting clinical judgment and the behavior of physicians and nurses toward patients [12]. However, another systematic review found only moderate-quality evidence that unconscious racial bias affects clinical decision-making [23]. A detailed discussion of the impact of unconscious bias on healthcare delivery is out of the scope of this article, which is focused on the impact of unconscious bias as it relates to healthcare professionals themselves. Nevertheless, strategies to mitigate the effects of unconscious bias (discussed later) can be applied to healthcare delivery and patient interactions.

MEASURING BIAS—THE IMPLICIT ASSOCIATION TEST (IAT)

While we know that unconscious bias is ubiquitous, it can be difficult to know how much it affects a person's daily interactions. In many cases, an individual's unconscious beliefs may differ from their explicit actions. For example, healthcare professionals, if asked, might say they try to treat all patients equally and may not believe they hold negative attitudes about patients. However, by definition, they may lack awareness of their own potential unconscious biases, and their actions may unknowingly suggest that these biases are active.

To measure unconscious bias, Drs Mahzarin Banaji and Anthony Greenwald developed the IAT in 1998 [24]. Many versions of the IAT are accessible online (available at: https://implicit.harvard.edu/implicit/), but one of the most studied is the Race IAT. The IAT has been extensively studied as an

inexpensive tool that provides feedback on an individual biases for self-reflection. The IAT calculates how quickly people associate different terms with each other. To determine unconscious race bias, the race IAT asks the subject to sort pictures (of white and black people) and words (good or bad) into pairs. For example, in one part of the Race IAT, participants must associate good words with white people and bad words with black people. In another part of the Race IAT, they must associate good words with black people and bad words with white people. Based on the reaction times needed to perform these tasks, the software calculates a bias score [20, 24]. Category pairs that are unconsciously preferred are easier to sort (and therefore take less time) than those that are not [24]. These unconscious associations can be identified even in individuals who outwardly express egalitarian beliefs [20, 24]. According to Project Implicit, the Race IAT has been taken >4 million times between 2002 and 2017, and 75% of test takers demonstrate an automatic white preference, meaning that most people (including a small group of black people) automatically associate white people with goodness and black people with badness [20]. Proponents of the IAT state that automatic preference for one group over another can signal potential discriminatory behavior even when the individuals with the automatic preference outwardly express egalitarian beliefs [20]. These preferences do not necessarily mean that an individual is prejudiced, which is associated with outward expressions of negative attitudes toward different social groups [20].

Many of the studies of unconscious bias described in this article use the IAT as the primary tool for measuring the phenomenon. Nevertheless, the degree to which the IAT predicts behavior is as of yet unclear, and it is important to recognize the limitations and criticisms of the IAT, as this is pertinent to its potential application in mitigating unconscious bias. Blanton et al reanalyzed data from 2 studies supporting the validity of the IAT, claiming that there is no evidence predicting individual behavior, with concerns for interjudge reliability and inclusion of outliers affecting results [25]. Response to this criticism by McConnell et al describes extensive training of test judges and evidence that the reanalysis was not a perfect replication of methods [26]. Blanton et al argue further in a different article that attempting to explain behavior on the basis of results of the IAT is problematic because the test relies on an arbitrary metric, leading to identified preferences when individuals are "behaviorally neutral" [27]. Notwithstanding the limitations of the IAT, none of its critics refute the existence of unconscious bias and that it can influence life experiences. The following sections review how unconscious bias affects different groups in the healthcare workforce.

Racial Bias

Medical school admissions committees serve as an important gatekeeper to address the significant disparities between racial

and ethnic minorities in healthcare as compared to the general population. Yet one study demonstrated that members of a medical school admissions committee displayed significant unconscious white preference (especially among men and faculty members) despite acknowledging almost zero explicit white preference [28]. An earlier study of unconscious racial and social bias in medical students found unconscious white and upper-class preference on the IAT but no obvious unconscious preferences in students' response to vignette-based patient assessments [29]. Unconscious bias affects the lived experiences of trainees, can potentially influence decisions to pursue certain specialties, and may lead to isolation. A recent study by Osseo-Asare et al described African American residents' experiences of being only "one of a few" minority physicians; some major themes included discrimination, the presence of daily microaggressions, and the burden of being tasked as race/ ethnic "ambassadors," expected to speak on behalf of their demographic group [30].

Gender Bias

Gender bias in medical education and leadership development has been well documented [11, 31]. Medical student evaluations vary depending on the gender of the student and even the evaluator [31]. Similar studies have demonstrated gender bias in qualitative evaluations of residents and letters of recommendations, with a more positive tone and use of agentic descriptors in evaluations of male residents as compared to female residents [11]. Studies evaluating inclusion of women as speakers have also demonstrated gender bias, with fewer women invited to speak at grand rounds [9] and differences in the formal introductions of female speakers as compared to male speakers [32, 33], with men more likely referred to by their official titles than women.

Sexual and Gender Minority Bias

Sexual and gender minority groups are underrepresented in medicine and experience bias and microaggressions similar to those experience by racial and ethnic minorities. Experiences with or perceptions of bias lead to junior physicians not disclosing their sexual identity on the personal statement part of their residency applications for fear of application rejection or not disclosing that they are gay to colleagues and supervisors for fear of rejection or poor evaluations [34]. In one study, some physician survey respondents indicated some level of discomfort about people who are gay, transgender, or living with HIV being admitted to medical school. These respondents were less likely to refer patients to physician colleagues who were gay, transgender, or living with HIV [35]. These explicit biases were significantly reduced, compared with those revealed in prior surveys done in 1982 and 1999; opposition to gay medical school applicants went from 30% in 1982 to 0.4% in 2017, and discomfort with referring patients to gay physicians went from 46% in 1982 to 2% in 2017 [35]. The 2017 survey did not measure levels of unconscious bias, which is likely to still be pervasive despite decreased explicit bias. As with other types of bias, these data reveal that explicit bias against gay physicians has decreased over time; the degree of unconscious bias, however, likely persists. While this is encouraging to some degree, unconscious bias may be much more challenging to confront than explicit bias. Thus, members of underrepresented groups may be left wondering about the intentions of others and being labeled as "too sensitive."

Studies including the perspectives of LGBTQ healthcare professionals demonstrate that major challenges to their academic careers persist to this day. These include lack of LGBTQ mentorship, poor recognition of scholarship opportunities, and noninclusive or even hostile institutional climates [36]. Phelan et al studied changes in biased attitudes toward sexual and gender minorities during medical school and found that reduced unconscious and explicit bias was associated with more-frequent and favorable interactions with LGBTQ students, faculty, residents, and patients [37].

Disability Bias

Physicians with disabilities constitute another minority group that may experience bias in medicine, and the degree to which they experience this may vary, depending on whether disabilities may be visible or invisible. One study estimated the prevalence of self-disclosed disability in US medical students to be 2.7% [7]. Medical schools are charged with complying with the Americans With Disabilities Act, but only a minority of schools support the full spectrum of accommodations for students with disabilities [38]. Many schools do not include a specific curriculum for disability awareness [39]. Physicians with disabilities have felt compelled to work twice as hard as their able-bodied peers for acceptance, struggled with stigma and microaggressions, and encountered institutional climates where they generally felt like they did not belong [40]. These are themes that are shared by individuals from racial and ethnic minorities.

MITIGATING UNCONSCIOUS BIAS

A strategy to counter unconscious bias requires an intentional multidimensional approach and usually operates in tandem with strategies to increase diversity, inclusion, and equity [41, 42]. This is becoming increasingly important in training programs in the various specialties, including infectious diseases. The Accreditation Council for Graduate Medical Education recently updated their common program requirements for fellowship programs and has stipulated that, effective July 2019, "[t]he program's annual evaluation must include an assessment of the program's efforts to recruit and retain a diverse workforce" [43]. The implication of this requirement is that recognition

and mitigation of potential biases that may influence retention of a diverse workforce will ultimately be evaluated (directly or indirectly).

Mitigating unconscious bias and improving inclusivity is a long-term goal requiring constant attention and repetition and a combination of general strategies that can have a positive influence across all groups of people affected by bias [44]. These strategies can be implemented at organizational and individual levels and, in some cases, can overlap between the 2 domains (Figure 2). In this section, we review how infectious diseases clinicians and organizations like IDSA and hospitals can use some of these strategies to address and mitigate implicit bias in our specialty.

Organizational Strategies

Commitment to a Culture of Inclusion: More Than Just Diversity Training or Cultural Competency

Creating change requires more than just a climate survey, a vision statement, or creation of a diversity committee [45]. Organizations must commit to a culture shift by building institutional capacity for change [41, 46]. This involves reaffirming the need not only for the recruitment of a critical mass of underrepresented individuals, but equally importantly, the recruitment of critical actor leaders who take the role of change agents and have the power to create equitable environments [41, 47–49]. These change agents need not themselves be underrepresented; indeed, the success of culture change requires the involvement of allies within the majority group (eg, men, white people, and cis-gender heterosexual individuals). IDSA has demonstrated a commitment to this type of culture change with recent changes in leadership structure and with intentional

recruitment of individuals invested in diversity and inclusion; however, there is always room for reevaluation of other areas where diversity is desired.

Committing to a culture of inclusion at the academicinstitution level involves creating a deliberate strategy for medical trainee admission and evaluation and faculty hiring, promotion, and retention. Capers et al describe strategies for achieving diversity through medical school admissions, many of which can also be applied to faculty hiring and promotion [49]. Notable strategies they suggest include having admissions (or hiring) committee members take the IAT and reflect on their own potential biases before they review applications or interview candidates [49]. They also recommend appointing women, minorities, and junior medical professionals (students or junior faculty) to admissions committees, emphasizing the importance of different perspectives and backgrounds [49]. Organizations can also survey employee perception of inclusivity. These assessments include questions on the degree to which an individual feels a sense of belonging within an institution, alongside questions pertaining to experiences of bias on the grounds of cultural or demographic factors [50]. Conducting regular assessments and analysis of survey results, particularly on how individuals of diverse backgrounds feel they can exist within the organization and their culture simultaneously, allows organizations to ensure that their trainings on unconscious bias and promotion of cultural humility lead to long-term positive change. Furthermore, realizing that different demographic groups may feel less respected than others provides information on areas of focus for consequent refresher seminars on combating unconscious bias in conjunction with cultural humility.

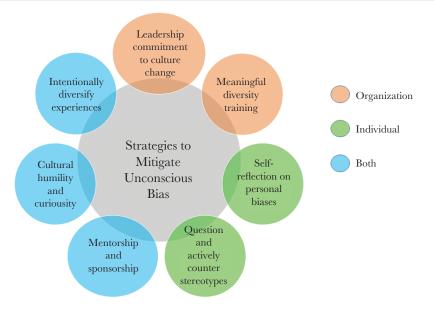


Figure 2. Organization-level and personal-level strategies to mitigate unconscious bias. Orange circles indicate organization-specific strategies, green circles indicate individual-level strategies, and blue circles represent strategies that can be emphasized on both organizational and individual levels to mitigate implicit bias.

Meaningful Diversity Training and the Usefulness of the IAT

Notwithstanding potential criticisms of the IAT with respect to prediction of discriminatory behavior, this can be a useful tool within a comprehensive organizational training seminar directed toward understanding and addressing individual unconscious bias. In the study by Capers et al, over two thirds of admissions committee members who took the IAT and responded to the post-IAT survey felt positive about the potential value of this tool in reducing their unconscious bias [28]. Additionally, almost half were cognizant of their IAT results when interviewing for the next admissions cycle, and 21% maintained that knowledge of this bias affected their decisions in the next admissions cycle [28]. Perhaps this knowledge led to conscious changes in committee member behavior because, in the following year, the matriculating class was the most diverse in that institution's history [28, 49]. A similar bias education intervention coupled with the IAT led to a decreased unconscious gender leadership bias in one academic center [48]. IDSA and infectious diseases practices (or academic divisions) could consider ways to incorporate this into already established training for those in leadership roles or on leadership search committees.

Of course, the potential applicability of the IAT can be overstated—at best, several meta-analyses have demonstrated that there may only be a weak correlation between IAT scores and individual behavior [51–53], and several criticisms of the IAT have already been discussed here. Additionally, while important to acknowledge that bias is pervasive, care must be taken to avoid normalizing bias and stereotypes because this may have the unintended consequence of reinforcing them [54]. Important points that should be emphasized when using the IAT as part of diversity training include that (1) people should be

aware of their own biases and reflect on their behaviors individually; (2) the IAT can suggest generally how groups of people with certain results may behave, rather than how each individual will behave; and (3) on its own, the IAT is not a sufficient tool to mitigate the effects of bias, because if there is to be any chance of success, an active cultural/behavioral change must be engaged in tandem with bias awareness and diversity training [55].

Individual Strategies

Deliberative Reflection

Before encounters that are likely to be affected by bias (such as trainee evaluations, letters of recommendation, feedback, interviews, committee decisions, and patient encounters), deliberative reflection can help an individual recognize their own potential for bias and correct for this [56]. It is also a good time to consider the perspective of the individual whom they will be evaluating or interacting with and the potential impact of their biases on that individual. Participants can be encouraged to evaluate how their own experiences and identities influence their interactions. Including data on lapses in proper care due to provider bias also proves helpful in giving workers real-life examples of the consequences of not being vigilant for bias [51, 57]. This motivated self-regulation based on reflections of individual biases has been shown to reduce stereotype activation and application [44, 58]. If one unintentionally behaves in a discriminatory manner, self-reflection and open discussion can help to repair relationships (Figure 3).

Question and Actively Counter Stereotypes

Individuals may question how they can actively counter stereotypes and bias in observed interactions. The

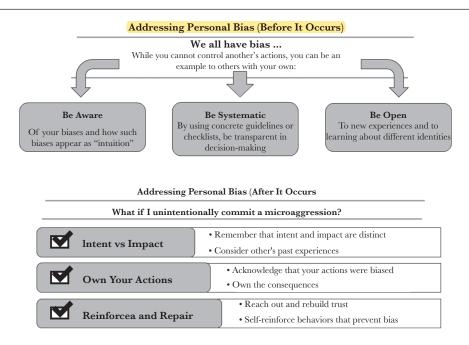


Figure 3. Strategies to address personal bias before and after it occurs.

active-bystander approach adapted from the Kirwan Institute [59] can provide insight into appropriate responses in these situations (Figure 4).

Strategies That Apply to Both Organizations and Individuals Cultural Competency and Beyond: Cultural Humility

Healthcare organizations seeking to develop providers who can work seamlessly with colleagues and more effectively treat patients from all cultural backgrounds have been conducting trainings in cultural competency [60]. The term "cultural competency" implies that one has achieved a static goal of championing inclusivity. This approach imparts a false sense of confidence in leaders and healthcare professionals and fails to recognize that our understanding of cultural barriers is continually growing and evolving [61]. Cultural humility has been proposed as an alternate approach, subsuming the teachings of cultural competency while steering participants toward a continuous path of discovery and respect during interactions with colleagues and patients of different cultural backgrounds [62]. Other synonymous terms include "cultural sensitivity" and "cultural curiosity." Rather than checking a box for training, cultural humility focuses on the individual and teaches that developing one's self-awareness is a critical step in achieving mindfulness for others [63]. Cultural humility emphasizes that individuals must acknowledge the experiential lens through which they view the world and that their view is not nearly as extensive, open, or dynamic as they might perceive [61]. By training leaders and healthcare professionals that they do not need to be and ultimately cannot be experts in all the intersecting cultures that they encounter, healthcare professionals can focus on a readiness to learn that can translate to greater confidence and willingness in caring for patients of varying backgrounds [61].

As cultural humility is important to recognizing and mitigating conscious and unconscious biases, patient simulations and diversity-related trainings should be augmented with discussions about cultural humility.

By integrating cultural humility into healthcare training procedures, organizations can strive to eliminate the perceived unease healthcare professionals might experience when interacting with individuals from backgrounds or cultures unfamiliar to them. Cultural humility starts from a condition of empathy and proceeds through the asking of open questions in each interaction (Figure 1). Instilling elements of cultural humility training within simulation-based learning provides participants with experience in treating a wide array of patients while providing low-risk, feedback-based learning opportunities [22, 64].

Diversify Experiences to Provide Counterstereotypical Interactions

Exposing individuals to counterstereotypical experiences can have a positive impact on unconscious bias [10, 44, 55]. Therefore, intentional efforts to include faculty from underrepresented groups as preceptors, educators, and invited speakers can help reduce the unconscious associations of these responsibilities as unattainable. Capers et al suggest that including students, women, and African Americans and other racial and ethnic minorities on admissions committees may be part of a strategy to reduce unconscious bias in medical school admissions [49]. If institutions, organizations, and conference program committees are aware of their own metrics in this respect, following this information with deliberate choices to remedy inequities can have a profound impact on increasing diversity [65]. Furthermore, in medical training, while deliberate curricula involving disparities and care of underrepresented individuals are beneficial, educators must be aware of the impact of the hidden curriculum on their trainees. The term "hidden curriculum" refers to the aspects of medicine that are learned by trainees outside the traditional classroom/didactic instruction environment. It encompasses observed interactions, behaviors, and experiences often driven by unconscious and explicit bias and institutional climate [66-68]. Students can be taught to actively seek out the hidden curriculum in their training

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Step 1: Acknowledge the bias in the interaction
Step 2: Make a conscious decision to address the bias
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Step 3: Utilize one of the following action strategies to counter the bias

"English is my first language, what's yours?" (eg, In response to "your English is so good!") Humor

Reject the stereotype outright "I don't get the joke"

Ask questions "What did you mean when you said ___?"

Acknowledge discomfort "What you just said makes me very uncomfortable. Please don't speak like that around me any-

more."

Re direct "I know you didn't intend for your words to be interpreted as a stereotype, but as your friend, I wanted to be honest with you that that's how it came across."

Step 4: Continue the conversion beyond the interaction

Adapted with permission from Tenney [59].

^aHumor is potentially culturally based, and may not always work

Figure 4. Kirwan Institute approach to countering unconscious bias as an active bystander.

environment, reflect on the lessons, and use this reflection to inform their own behaviors [67]. Individuals can intentionally diversify their own circles, connecting with people from different backgrounds and experiences. This can include the occasionally awkward and uncomfortable introductions at professional meetings or at community events, making an effort to read books by diverse authors, or trying new foods with a colleague. These are small behavioral changes that, with time, can help to retrain our brain to classify people as "same" instead of "other."

Mentorship and Sponsorship

Mentors can, at any stage in one's career, provide advice and career assistance with collaborations, but sponsors are typically more senior individuals who can curate high-profile opportunities to support a junior person, often with potential personal or professional risk if that person does not meet expectations. URMs and women physicians tend not to have as much support with mentoring and sponsorship as the majority group, white men. Qualitative studies of URM physician perspectives typically reveal themes of isolation and lack of mentorship, regardless of the URM group being studied [30, 36, 69]. Possible reasons include lack of mentors from similar backgrounds or ineffective mentoring in discordant mentor-mentee relationships. Mentor-training workshops that intentionally include unconscious bias training can enhance the effectiveness of mentors working with diverse trainees and junior faculty and address this potential barrier to URM success [70]. Providing mentorship within an individual department, as well as support for participating in external mentorship and career development programs, can help create sponsorship opportunities that eventually influence career advancement [41]. Many professional societies such as IDSA provide mentorship opportunities, and these can be enhanced by encouraging more sponsorship of junior clinicians for opportunities such as podium lectures, moderating at conferences, writing editorials, or committee positions.

SUMMARY

In the years since the IAT was first described, researchers have published countless data on the impact of unconscious bias. Fortunately, explicit and implicit attitudes toward many disenfranchised groups of people have regressed to a more neutral position over time [71], but this does not mean that unconscious bias has disappeared. Just as healthcare providers are required to stay up to date on medical techniques and procedures to best serve their patients, we propose that trainings involving the social aspects of medicine be treated similarly. Cultural humility is characterized by lifelong learning and is a key aspect of a successful provider-patient relationship. Thus, it is imperative that healthcare organizations and professional medical societies such as IDSA continually provide healthcare professionals

with learning opportunities to enhance their interactions with individuals different from themselves. Effectively addressing unconscious bias and subsequent disparities in IDSA will need comprehensive, multifaceted, and evidence-based interventions (Figure 5).

CALLTO ACTION

IDSA has demonstrated a commitment to diversifying its society leadership by commissioning the Gender Disparities Task Force and the Inclusion, Diversity, Access & Equity Task Force, reconfiguring existing committees, developing new committees (eg, the Leadership Development Committee), and creating new opportunities, such as the IDSA Leadership Institute. While these are important and impactful actions, we propose the following

Unconscious Bias Highlights

- Unconscious biases are attitudes or stereotypes that unknowingly alter our perceptions or understanding of our experiences, thereby affecting behavior interactions and decision-making.
- 2. Unconscious bias can influence behaviors, but the exact extent to which it does so is unclear.
- 3. Women and individuals underrepresented in medicine can have different experiences with recruitment, hiring, promotion, and compensation (among others) due to unconscious bias, as compared to their majority peers (white men).
- Strategies to mitigate unconscious bias are multifactorial but involve bias awareness, culture change, countering stereotypes, and intentional group diversification.
- The extent to which unconscious bias plays a role in diversity challenges within the specialty of infectious diseases is unknown.

The Infectious Diseases Society of America can play a role in mitigating unconscious bias by:

- Incorporating measurable evidence-based bias reduction strategies into infectious diseases training programs and membership at large
- Enhancing mentorship programs to intentionally seek equitable inclusion of those traditionally underrepresented in leadership
- c. Incorporating principles of cultural humility into leadership development
- d. Supporting infectious diseases divisions and fellowship programs with their group efforts to create a more diverse environment

Figure 5. Unconscious bias highlights.

additional steps to address the role of unconscious bias in various settings. First, develop an IDSA-sponsored climate survey to assess perceptions of inclusion and belonging within the Society, and repeat this climate assessment after implementing bias reduction strategies. Second, provide IDSA-sponsored education/ training on unconscious bias reduction strategies and cultural humility to academic infectious disease divisions and fellowship programs to support the recruitment and retention of a diverse infectious diseases physician workforce. Third, develop benchmarks for excellence in infectious diseases divisions and fellowship training programs to evaluate these bias reduction strategies. Fourth, provide education/training on unconscious bias-reduction strategies and cultural humility to leadership and membership within IDSA. Specifically, the board of directors, the Leadership Development Committee, the Awards Committee, and others involved in electing, nominating, or honoring members should consider including incorporating the IAT and bias-reduction education for their committee members. After implementing such strategies, IDSA should reevaluate metrics of awardees, committee chairs, and leadership to determine whether these strategies made an impact. Fifth, cultivate existing mentorship programs within IDSA, with the added focus of intentional mentoring and sponsorship of groups traditionally underrepresented in leadership. Sixth, commit to consistent review and revision of infectious diseases recruitment messaging, ensuring that materials and media counter harmful stereotypes and represent true diversity. Seventh, collect, review, and publish metrics of diversity in all facets of the membership, including IDWeek speaker demographic characteristics, IDSA journal editor/reviewers, guideline authorship, and committee membership, with intentional response strategies to change these demographic characteristics to a more diverse distribution. Eighth, be transparent about reporting of metrics, with clear accountability and flexibility to adjust initiatives based on results.

NOTE

Although there are numerous data describing the impact of unconscious bias on healthcare delivery, clinician-patient interactions, and patient outcomes, discussion of these aspects is out of the scope of this article, which focuses on the impact of unconscious bias on healthcare professionals. Additionally, the majority of data on unconscious bias presented in this article relates to general academic training and career development, as data in the infectious diseases practice community is limited. This represents an area of need for evaluation within the specialty of infectious diseases, since a vast majority of members are in clinical practice and may experience bias in varying degrees. While it is important to support trainees who may experience unconscious bias, it is also critical to provide support for infectious diseases clinicians further along in their careers, as a means to maintain retention in the specialty. Finally, some individuals may prefer person-first language, while others may

prefer identity-first language when referring to disabilities. We consistently used person-first language throughout this manuscript based on the recommendation by the Centers for Disease Control & Prevention (https://www.cdc.gov/ncbdd/disabilityandhealth/pdf/disabilityposter_photos.pdf).

Notes

Supplement sponsorship. This supplement is sponsored by the Infectious Diseases Society of America.

Acknowledgments. We thank Drs Molly Carnes, Ranna Parekh, and Arghavan Salles, as well as Lena Tenney, for critical review of this manuscript before publication; Mr Chris Busky, for providing written communications about the demographic characteristics of IDSA membership and leadership; and Catherine Hiller, for her assistance with manuscript preparation.

J. R. M. wrote first draft and subsequent revisions; D. S. and R. V. contributed to the first draft and subsequent revisions; S. K. contributed to the first draft and subsequent revisions; Y. A. M. contributed to subsequent revisions; and all authors reviewed a final version of the work before submission.

Potential conflicts of interest. J. R. M. and D. S. are members of the IDSA Inclusion, Diversity, Access & Equity Task Force. All other authors report no potential conflicts.

All authors have submitted the ICMJE form for Disclosure of Potential Conflicts of Interest. Conflicts that the editors consider relevant to the content of the manuscript have been disclosed. All authors have submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Conflicts that the editors consider relevant to the content of the manuscript have been disclosed.

References

- 1. Institute of Medicine (US) Committee on Institutional and Policy-Level Strategies for Increasing the Diversity of the U.S. Healthcare Workforce. In the nation's compelling interest: ensuring diversity in the health-care workforce. Smedley BD, Stith Butler A, Bristow LR, eds. Washington, DC: National Academies Press (US), 2004.
- American College of Physicians. Racial and ethnic disparities in health care, updated 2010. https://www. acponline.org/system/files/documents/advocacy/current_ policy_papers/assets/racial_disparities.pdf. Accessed 25 January 2019.
- Association of American Medical Colleges. Underrepresented in medicine definition. https://www.aamc.org/initiatives/urm/. Accessed 19 January 2019.
- United States Census Bureau. US Census Bureau QuickFacts. https://www.census.gov/quickfacts/fact/table/ US#. Accessed 2 January 2019.
- 5. Newport F. In U.S., estimate of LGBT population rises to 4.5%. https://news.gallup.com/poll/234863/

- estimate-lgbt-population-rises.aspx. Accessed 25 January 2019.
- Association of American Medical Colleges (AAMC).
 AAMC facts & figures 2016; diversity in medical education.
 http://www.aamcdiversityfactsandfigures2016.org/index.
 html. Accessed 25 January 2019.
- 7. Meeks LM, Herzer KR. Prevalence of self-disclosed disability among medical students in US allopathic medical schools. JAMA **2016**; 316:2271–2.
- Association of American Medical Colleges. U.S. medical school applications and matriculants by school, state of legal residence, and sex, 2018–2019. https://www.aamc.org/download/321442/data/factstablea1.pdf. Accessed 4 January 2019.
- 9. Boiko JR, Anderson AJM, Gordon RA. Representation of women among academic grand rounds speakers. JAMA Intern Med **2017**; 177:722–4.
- Carnes M, Bartels CM, Kaatz A, Kolehmainen C. Why is John more likely to become department chair than Jennifer? Trans Am Clin Climatol Assoc 2015; 126:197–214.
- 11. Gerull KM, Loe M, Seiler K, McAllister J, Salles A. Assessing gender bias in qualitative evaluations of surgical residents. Am J Surg **2019**; 217:306–13.
- 12. FitzGerald C, Hurst S. Implicit bias in healthcare professionals: a systematic review. BMC Med Ethics **2017**;
- 13. Staats C, Dandar V, St Cloud T, Wright R. How the prejudices we don't know we have affect medical education, medical careers, and patient health. In: Darcy Lewis and Emily Paulsen, eds. Proceedings of the 2014 diversity and inclusion innovation forum: unconscious bias in academic medicine. Association of American Medical Colleges. Association of American Medical Colleges and the Kirwan Institute for the Study of Race and Ethnicity at The Ohio State University, USA 2017;1–93.
- 14. Staats C, Patton C. State of the science: implicit bias review: the Ohio State University Kirwan Institute for the study of race and ethnicity. OH: The Kirwan Institute for the Study of Race and Ethnicity at The Ohio State University, **2013**; 1–102
- 15. Institute of Medicine. The health of lesbian, gay, bisexual, and transgender people: building a foundation for better understanding. Washington, DC: The National Academies Press, 2011.
- 16. Gonzales G, Przedworski J, Henning-Smith C. Comparison of health and health risk factors between lesbian, gay, and bisexual adults and heterosexual adults in the united states: results from the national health interview survey. JAMA Intern Med 2016; 176:1344–51.
- 17. Valdiserri RO, Holtgrave DR, Poteat TC, Beyrer C. Unraveling health disparities among sexual and gender

- minorities: a commentary on the persistent impact of stigma. J Homosex **2019**; 66:571–89.
- Trotman R, Kim AI, MacIntyre AT, Ritter JT, Malani AN.
 2017 infectious diseases society of america physician compensation survey: results and analysis. Open Forum Infect Dis 2018; 5:ofy309.
- Marcelin JR, Bares SH, Fadul N. Improved infectious diseases physician compensation but continued disparities for women and underrepresented minorities. Open Forum Infect Dis 2019; 6:ofz042.
- 20. Banaji MR, Greenwald AG. Blindspot: hidden biases of good people. 1st ed. USA: Delacorte Press, **2013**.
- 21. Francis CK. Medical ethos and social responsibility in clinical medicine. J Urban Health **2001**; 78:29–45.
- 22. Teal CR, Gill AC, Green AR, Crandall S. Helping medical learners recognise and manage unconscious bias toward certain patient groups. Med Educ **2012**; 46:80–8.
- Dehon E, Weiss N, Jones J, Faulconer W, Hinton E, Sterling S. A systematic review of the impact of physician implicit racial bias on clinical decision making. Acad Emerg Med 2017; 24:895–904.
- 24. Greenwald AG, McGhee DE, Schwartz JL. Measuring individual differences in implicit cognition: the implicit association test. J Pers Soc Psychol **1998**; 74:1464–80.
- 25. Blanton H, Jaccard J, Klick J, Mellers B, Mitchell G, Tetlock PE. Strong claims and weak evidence: reassessing the predictive validity of the IAT. J Appl Psychol **2009**; 94:567–82; discussion 583–603.
- McConnell AR, Leibold JM. Weak criticisms and selective evidence: Reply to Blanton *et al.* (2009). J Appl Psychol, 2009;94, 583-9. doi:10.1037/a0014649
- 27. Blanton H, Jaccard J, Strauts E, Mitchell G, Tetlock PE. Toward a meaningful metric of implicit prejudice. J Appl Psychol **2015**; 100:1468–81.
- 28. Capers Q 4th, Clinchot D, McDougle L, Greenwald AG. Implicit racial bias in medical school admissions. Acad Med **2017**; 92:365–9.
- Haider AH, Sexton J, Sriram N, et al. Association of unconscious race and social class bias with vignette-based clinical assessments by medical students. JAMA 2011; 306:942–51.
- 30. Osseo-Asare A, Balasuriya L, Huot SJ, et al. Minority resident physicians' views on the role of race/ethnicity in their training experiences in the workplace. JAMA Netw Open **2018**; 1:e182723.
- Riese A, Rappaport L, Alverson B, Park S, Rockney RM. Clinical performance evaluations of third-year medical students and association with student and evaluator gender. Acad Med 2017; 92:835–40.
- Files JA, Mayer AP, Ko MG, et al. Speaker introductions at internal medicine grand rounds: forms of address reveal gender bias. J Womens Health (Larchmt) 2017; 26:413–9.

- 33. Mehta S, Rose L, Cook D, Herridge M, Owais S, Metaxa V. The speaker gender gap at critical care conferences. Crit Care Med 2018; 46:991–996.
- 34. Lee KP, Kelz RR, Dubé B, Morris JB. Attitude and perceptions of the other underrepresented minority in surgery. J Surg Educ **2014**; 71:e47–52.
- 35. Marlin R, Kadakia A, Ethridge B, Mathews WC. Physician attitudes toward homosexuality and HIV: the PATHH-III survey. LGBT Health **2018**; 5:431–42.
- Sánchez NF, Rankin S, Callahan E, et al. LGBT trainee and health professional perspectives on academic careersfacilitators and challenges. LGBT Health 2015; 2:346–56.
- Phelan SM, Burke SE, Hardeman RR, et al. Medical school factors associated with changes in implicit and explicit bias against gay and lesbian people among 3492 graduating medical students. J Gen Intern Med 2017; 32:1193–201.
- 38. Zazove P, Case B, Moreland C, et al. U.S. medical schools' compliance with the americans with disabilities act: findings from a national study. Acad Med **2016**; 91:979–86.
- Seidel E, Crowe S. The state of disability awareness in american medical schools. Am J Phys Med Rehabil 2017; 96:673-6.
- 40. Meeks LM, Herzer K, Jain NR. Removing barriers and facilitating access: increasing the number of physicians with disabilities. Acad Med **2018**; 93:540–3.
- 41. DiBrito SR, Lopez CM, Jones C, Mathur A. Reducing implicit bias: association of women surgeons #HeForShe task force best practice recommendations. J Am Coll Surg **2019**; 228:303–9.
- 42. South-Paul JE, Roth L, Davis PK, et al. Building diversity in a complex academic health center. Acad Med **2013**; 88:1259–64.
- 43. Accreditation Council for Graduate Medical Education. Common program requirements (fellowship). https://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/CPRFellowship2019.pdf. Accessed 19 January 2019.
- 44. Devine PG, Forscher PS, Austin AJ, Cox WT. Long-term reduction in implicit race bias: a prejudice habit-breaking intervention. J Exp Soc Psychol **2012**; 48:1267–78.
- 45. Carnes M, Fine E, Sheridan J. Promises and pitfalls of diversity statements: proceed with caution. Acad Med **2019**; 94:20–4.
- 46. Smith DG. Building institutional capacity for diversity and inclusion in academic medicine. Acad Med **2012**; 87:1511–5.
- 47. Helitzer DL, Newbill SL, Cardinali G, Morahan PS, Chang S, Magrane D. Changing the culture of academic medicine: critical mass or critical actors? J Womens Health (Larchmt) **2017**; 26:540–8.
- 48. Girod S, Fassiotto M, Grewal D, et al. Reducing implicit gender leadership bias in academic medicine with an educational intervention. Acad Med **2016**; 91:1143–50.

- Capers Q, McDougle L, Clinchot DM. Strategies for achieving diversity through medical school admissions. J Health Care Poor Underserved 2018; 29:9–18.
- 50. Person SD, Jordan CG, Allison JJ, et al. Measuring diversity and inclusion in academic medicine: the diversity engagement survey. Acad Med **2015**; 90:1675–83.
- 51. Greenwald AG, Banaji MR, Nosek BA. Statistically small effects of the implicit association test can have societally large effects. J Pers Soc Psychol **2015**; 108:553–61.
- 52. Oswald FL, Mitchell G, Blanton H, Jaccard J, Tetlock PE. Predicting ethnic and racial discrimination: a metaanalysis of IAT criterion studies. J Pers Soc Psychol 2013; 105:171–92.
- 53. Oswald FL, Mitchell G, Blanton H, Jaccard J, Tetlock PE. Using the IAT to predict ethnic and racial discrimination: small effect sizes of unknown societal significance. J Pers Soc Psychol **2015**; 108:562–71.
- 54. Duguid MM, Thomas-Hunt MC. Condoning stereotyping? How awareness of stereotyping prevalence impacts expression of stereotypes. J Appl Psychol 2015; 100:343–59.
- 55. Dasgupta N. Chapter five—implicit attitudes and beliefs adapt to situations: a decade of research on the malleability of implicit prejudice, stereotypes, and the self-concept. In: Devine P, Plant A, eds. Advances in experimental social psychology. Vol. 47. USA: Academic Press, **2013**:233–79.
- Phillips NA, Tannan SC, Kalliainen LK. Understanding and overcoming implicit gender bias in plastic surgery. Plast Reconstr Surg 2016; 138:1111–6.
- Nelson SC, Prasad S, Hackman HW. Training providers on issues of race and racism improve health care equity. Pediatr Blood Cancer 2015; 62:915–7.
- 58. Burns MD, Monteith MJ, Parker LR. Training away bias: the differential effects of counterstereotype training and self-regulation on stereotype activation and application. J Exp Soc Psychol **2017**; 73:97–110.
- 59. Tenney L. Being an active bystander: strategies for challenging the emergence of bias. Columbus, OH: Ohio State University Kirwan Institute for the Study of Race and Ethnicity, **2017**.
- 60. Harrison G, Turner R. Being a 'culturally competent' social worker: making sense of a murky concept in practice. Br J Soc Work **2010**; 41:333–350.
- 61. Juarez JA, Marvel K, Brezinski KL, Glazner C, Towbin MM, Lawton S. Bridging the gap: a curriculum to teach residents cultural humility. Fam Med **2006**; 38:97–102.
- Chang ES, Simon M, Dong X. Integrating cultural humility into health care professional education and training. Adv Health Sci Educ Theory Pract 2012; 17:269–78.
- Kumagai AK, Lypson ML. Beyond cultural competence: critical consciousness, social justice, and multicultural education. Acad Med 2009; 84:782–7.
- 64. Beauchamp GA, McGregor AJ, Choo EK, Safdar B, Rayl Greenberg M. Incorporating sex and gender into

- culturally competent simulation in medical education. J Womens Health (Larchmt) **2019**. doi:10.1089/jwh.2018.7271
- 65. van Ryn M, Hardeman R, Phelan SM, et al. Medical school experiences associated with change in implicit racial bias among 3547 students: a medical student CHANGES study report. J Gen Intern Med **2015**; 30:1748–56.
- 66. Hafferty FW. Beyond curriculum reform: confronting medicine's hidden curriculum. Acad Med **1998**; 73:403–7.
- 67. Neve H, Collett T. Empowering students with the hidden curriculum. Clin Teach **2018**; 15:494–9.
- 68. Fallin-Bennett K. Implicit bias against sexual minorities in medicine: cycles of professional influence and the role of the hidden curriculum. Acad Med **2015**; 90:549–52.
- 69. Liebschutz JM, Darko GO, Finley EP, Cawse JM, Bharel M, Orlander JD. In the minority: black physicians

- in residency and their experiences. J Natl Med Assoc **2006**; 98:1441-8.
- 70. Gandhi M, Fernandez A, Stoff DM, et al. Development and implementation of a workshop to enhance the effectiveness of mentors working with diverse mentees in HIV research. AIDS Res Hum Retroviruses **2014**; 30:730–7.
- 71. Charlesworth TES, Banaji MR. Patterns of implicit and explicit attitudes: I. Long-Term change and stability from 2007 to 2016. Psychol Sci **2019**; 30:174–92.
- 72. Yeager KA, Bauer-Wu S. Cultural humility: essential foundation for clinical researchers. Appl Nurs Res **2013**; 26:251–6.
- 73. Sue DW, Capodilupo CM, Torino GC, et al. Racial microaggressions in everyday life: implications for clinical practice. Am Psychol **2007**; 62:271–86.

POVERTY AND CHILD HEALTH DISPARITIES

Child Health Disparities: What Can a Clinician Do?

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Pediatric primary and specialty practice has changed, with more to do, more regulation, and more family needs than in the past. Similarly, the needs of patients have changed, with more demographic diversity, family stress, and continued health disparities by race, ethnicity, and socioeconomic status. How can clinicians continue their dedicated service to children and ensure health equity in the face of these changes? This article outlines specific, practical, actionable, and evidence-based activities to help clinicians assess and address health disparities in practice. These tools may also support patient-centered medical home recognition, national and state cultural and linguistic competency standards, and quality benchmarks that are increasingly tied to payment. Clinicians can play a critical role in (1) diagnosing disparities in one's community and practice, (2) innovating new models to address social determinants of health, (3) addressing health literacy of families, (4) ensuring cultural competence and a culture of workplace equity, and (5) advocating for issues that address the root causes of health disparities. Culturally competent care that is sensitive to the needs, health literacy, and health beliefs of families can increase satisfaction, improve quality of care, and increase patient safety. Clinical care approaches to address social determinants of health and interrupting the intergenerational cycle of disadvantage include (1) screening for new health "vital signs" and connecting families to resources, (2) enhancing the comprehensiveness of services, (3) addressing family health in pediatric encounters, and (4) moving care outside the office into the community. Health system investment is required to support clinicians and practice innovation to ensure equity.

Child health and health care disparities by race, ethnicity, and socioeconomic status (SES) are persistent and pervasive. Children of color and in lowincome families continue to fall behind their more affluent and majority peers in health status.^{1,2} Disparities that originate in childhood have been linked to adult chronic illness.3 Although disparities must be addressed on the population and policy level, and issues such as poverty, discrimination, or environmental exposures may feel overwhelming, clinicians have a critical role in promoting health equity. The intimate clinician-patient relationship provides an opportunity to uncover

and address the root causes of poor health. Culturally competent care that is sensitive to the needs, health literacy, and health beliefs of patients and families can increase quality of care and patient safety.⁴ Health disparities are a health care quality and safety issue. When differential treatment or outcomes related to patient characteristics exist, quality improvement (QI) approaches are imperative.

Health inequality refers to differences in the health of individuals or populations, whereas health inequity or disparity refers to inequalities thought to be unfair, unjust, and

abstract



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The content is solely the responsibility of the authors and does not necessarily represent the official views of the funding agencies.

www.pediatrics.org/cgi/doi/10.1542/peds.2014-4126

DOI: 10.1542/peds.2014-4126

Accepted for publication Jun 3, 2015

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PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

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FINANCIAL DISCLOSURE: The authors have indicated they have no financial relationships relevant to this article to disclose.

FUNDING: This publication was supported by the DC-Baltimore Research Center on Child Health Disparities P20 MD000198 from the National Institute on Minority Health and Health Disparities (all authors) and Centro SOL: Johns Hopkins Center for Salud/Health and Opportunity for Latinos (Dr Cheng). Funded by the National Institutes of Health (NIH).

POTENTIAL CONFLICT OF INTEREST: The authors have indicated they have no potential conflicts of interest to disclose.

avoidable.⁵ Almost all U.S. children have had a well-child visit in the past year,⁶ making primary care an ideal location to ensure that children have the support necessary for optimal development and that adversities are buffered. The family contact that both primary and specialty clinicians have in outpatient and inpatient settings can promote health equity and improve health outcomes. Patient-centered medical home recognition⁷ and quality benchmarks tied to payment recognize the importance of culturally competent care. National standards for culturally and linguistically appropriate services (CLAS) in health care by the Office of Minority Health have been increasingly embraced by state agencies and legislation. This article outlines specific, practical, actionable, and evidence-based activities that help clinicians assess and address health disparities related to race/ethnicity and SES (Table 1).

"DIAGNOSE DISPARITIES" IN ONE'S COMMUNITY AND PRACTICE

In the 1940s, Sidney Kark conceptualized "community-oriented primary care"8; later, the Folsom Commission report, "Health Is a Community Affair," emphasized the importance of knowing one's community and improving health on the local level. 9,10 Today, these ideas continue to resonate. Because communities are constantly changing, CLAS standards emphasize the importance of conducting "regular assessments of community health assets and needs and using the results to plan and implement services that respond to the cultural and linguistic diversity of populations in the service area."11 Free and easyto-navigate websites provide city, district, county, state, and national data as well as maps on child and family demographics, health status, and well-being by race/ethnicity and poverty status, with comparisons to others and targets for improvement (Table 1). By periodically reviewing

these data, clinicians can keep tabs on the challenges their patients may face and can identify opportunities to help. For instance, if data show changing demographics with a growing immigrant community, assessing linguistic competency, health literacy, and cultural norms may be necessary, with implications for educational efforts, materials, and staffing.

In addition to reviewing population data, examining one's practice performance data stratified by insurance status, race/ethnicity, language, and SES as outlined in the Affordable Care Act (ACA) is critical to understanding areas for improvement. In this era of clinician accountability and performance measures, the QI and health disparities fields must join forces. There is evidence that culturally tailored or targeted QI approaches may have more promise than generic efforts. 12,13

Finally, families must be involved. Conducting a community needs assessment and including families in improvement approaches can be powerful. For instance, an assessment of community needs identified poor oral health and difficulty finding pediatric dentists who accepted Medicaid. Identifying dentists and disseminating this information improved access and provided a patient voice in advocacy efforts to increase capacity.

Many practices and hospitals have initiated family advisory boards to provide feedback on care systems. Families can provide valuable insight about screening and referral efforts, development of community partnerships, and prioritization of resources and interventions. The National Initiative for Children's Healthcare Quality's toolkit, "Creating a Patient and Family Advisory Council," provides a step-by-step approach to assess practice readiness, recruit members, and involve, evaluate, and sustain an advisory council. 14 The Robert Wood Johnson Foundation has a compendium of useful tools to

engage patients in improving ambulatory care (Table 1).¹⁵ Partnering with the community is the focus of research efforts by the Patient-Centered Outcomes Research Institute established in the ACA.

"DIAGNOSE DISPARITIES" IN CLINICAL ENCOUNTERS AND INNOVATE NEW PRACTICE MODELS

To prevent or buffer adversities that children and families may encounter, new delivery approaches and payment models are needed. The Maternal and Child Health Bureau encourages a "whole-person, whole-family, whole-community systems approach" that addresses upstream social determinants of health.16 Clinical approaches include (1) diagnosing disparities by universal screening and connecting families to resources, (2) enhancing the comprehensiveness of services to address social determinants, (3) addressing family health in pediatric encounters, and (4) moving care outside the office into the community (eg. home, school, daycare) (Fig 1).

The first approach is to diagnose disparities through universal screening for new health vital signs. The American Academy of Pediatrics (AAP) Policy on Health Equity emphasizes that clinic visits are opportunities to screen and address the social, economic, educational, environmental, and person-capital needs of children and families.¹⁷ Whereas clinical vital signs include temperature, heart rate, respiratory rate, blood pressure, and growth parameters, the Robert Wood Johnson Foundation Commission to Build a Healthier America strongly recommended that "new health vital signs" reflecting the root causes of health disparities be included, such as food security, educational progress, family employment, health literacy, neighborhood safety, and adequate housing. 18 For instance, poor housing is linked to health status.19-21 A child

TABLE 1 Free Web Resources to Assist Clinicians in Assessing and Addressing Health Disparities in Practice

Topic	Resource	Organization	URL
Obtaining Community Statistics (City, Metropolitan Area, District, County, State and National Data)	America's Children: Key National Features of Well-Being	Federal Interagency Forum on Child and Family Statistics	www.childstats.gov
	County Health Rankings & Roadmaps Program	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute	www.countyhealthrankings.org
	Diversitydatakids.org	Brandeis University	diversitydatakids.org
	KIDS COUNT	Annie E. Casey Foundation	datacenter.kidscount.org
	Agenda for Children 2014–2015	American Academy of Pediatrics Division of State Government Affairs	www.aap.org/en-us/advocacy-and- policy/state-advocacy/Pages/ Poverty%20and%20Child%20 Health%20State%20Advocacy% 20Resources.aspx
	State Health Facts	Henry J. Kaiser Family Foundation	kff.org/statedata
Families to Improve Practice	Creating a Patient and Family Advisory Council: A Toolkit for Pediatric Practices	National Institute for Children's Health Quality	www.nichq.org/resources/PFAC- toolkit-landingpage.html
	Engaging Patients in Improving Ambulatory Care: A Compendium of Tools	Robert Wood Johnson Foundation	www.rwjf.org/en/research-publications /find-rwjf-research/2013/03/engaging- patients-in-improving-ambulatory-care.html
Health Literacy Toolkits	Health Literacy Universal Precautions Toolkit	Agency for Healthcare Research and Quality (AHRQ)	www.ahrq.gov/professionals/quality- patient-safety/quality-resources/ tools/literacy-toolkit/ healthliteracytoolkit.pdf
	Health Literacy and Patient Safety: Help Patients Understand Kit and Manual for Clinicians	American Medical Association	med.fsu.edu/userFiles/file/ ahec_health_clinicians_manual.pdf
	Teach-Back Training	Always Use Teachback! Toolkit	www.teachbacktraining.org
	Health Literacy Video	North Carolina Program on Health Literacy	http://nchealthliteracy.org/teachingaids.html
	See AHRQ Toolkit above for section on teach-back		
Testing for Unconscious Bias	Implicit Association Test	Project Implicit, Harvard University	implicit.harvard.edu/implicit/education.html
Cultural Competence Toolkits	AAP Culturally Effective Care Toolkit	American Academy of Pediatrics	www.aap.org/en-us/professional- resources/practice-support/Patient- Management/Pages/Culturally- Effective-Care-Toolkit.aspx
	National Center for Cultural Competence Self Assessments	National Center for Cultural Competence, Georgetown University	nccc.georgetown.edu/resources/ assessments.html

with asthma living in housing with a cockroach infestation or mold will require assistance from social workers, legal advocates, and housing organizations to reduce allergen exposure and improve health. Addressing these vital signs will require research on effective screeners and interventions, partnerships with community organizations, and appropriate payment for screening and management.

Although the clinician's office is often considered a safe environment in which to address family psychosocial problems, many clinicians fail to monitor these new vital signs and subsequently miss the opportunity to

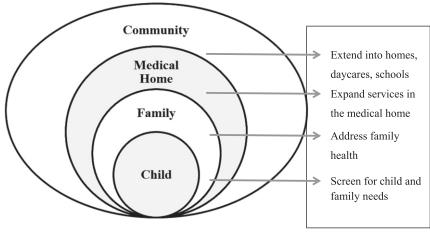


FIGURE 1Four approaches to address health disparities in clinical practice.

help.²² The WE CARE 10-item family psychosocial screening instrument was developed to assess family employment, education, housing, or food needs. A study using this screener with referral to community resources was found to be feasible in primary care, adding <2 minutes to the visit and leading to greater discussion of topics and referral completion.^{23,24} Screening can be completed before or during a visit using the Internet, smart phones, kiosks, or paper and pencil. The iScreen study compared a screener for social determinants of health on a computer tablet or faceto-face in a pediatric emergency department, finding greater disclosure in electronic format.²⁵ Screening for adverse childhood experiences has also been proposed to identify and address trauma.

Some clinicians have avoided this type of screening because of limited resources. However, clinician acknowledgment, support, and referrals can be therapeutic, and educational resources are available. For instance, the smokefree.gov website from the National Cancer Institute provides a free quit line or instant messaging support, and all states have quit lines listed. If screening suggests depression, acknowledgment of the concern and referral to clinicians and crisis

management hotlines are critical first steps. New models connecting patients to community resources have been developed. The national Health Leads program uses a Family Help Desk staffed by undergraduate volunteers who connect families to community services. The CAP4Kids Web site (cap4kids.org/whatiscap4kids.html) provides upto-date information on community resources in certain cities. Pew web-based products for sale are being developed and disseminated.

Increasing the comprehensiveness of services in primary or specialty care can provide one-stop shopping to address the new vital signs.

Integrating services such as mental health can increase utilization and improve health outcomes.³⁰

The Healthy Steps model incorporates a child psychologist or developmentalist into pediatric practices, demonstrating greater parent satisfaction³¹ and improvement in timely well-child care, immunization and breastfeeding rates, and discipline strategies.^{32–34}

Other "wraparound" services could include social work, case management, nutritionists, lactation consultants, health educators, substance use counselors, legal advocates, and career counselors. Reach Out and Read family literacy

programs in primary care have demonstrated effectiveness in increasing parental support and how much parents read to their children.^{35–37} Medical-legal partnerships integrate pro bono legal services into care teams to address issues such as public benefits, housing, and special education.³⁸ The Johns Hopkins Children's Center Harriet Lane Clinic is an example of a medical home that has incorporated many of the above services through partnerships with community organizations, optimized billing, and leveraged funds from health plans and private foundations.³⁰ With the current emphasis on population health and quality measures, payers have greater interest in investing in these services to improve practice and community health outcomes.

The third approach pertains to family health. Pediatric professionals recognize that child and family health are intertwined.³⁹ The AAP Task Force on the Family states that "families are the most central and enduring influence in children's lives" and coined the term "family pediatrics," which extends pediatrics to include screening, assessment, and referral of parents regarding their health issues. 40 Pediatrics offers an opportunity to facilitate access for families. The AAP recommends screening for parental smoking, maternal depression, and intimate partner violence to improve health for both parents and children.41-44

Addressing preconception women's health in pediatric practice is another family care opportunity. Although U.S. infant mortality rates have decreased over time, racial disparities persist. Prenatal interventions have been emphasized, but there is growing attention to preconception women's health. Addressing women's access to care, reproductive planning, nutrition, substance use, and mental health can improve health of future pregnancies and family health. 45,46 Pediatric

practice is an opportune location of contact, as clinicians see all preconceptional adolescents as well as mothers who are interconceptional before their next child. Demonstration of cost-effectiveness and payment models for implementation are needed.

A fourth approach is to move care outside the office and into the community where children are: in the home, daycare, or school. Whereas the medical approach is to ask families to come to offices, population health approaches suggest place-based initiatives and outreach to the child's natural environment. With growing emphasis on population health, prevention of readmissions, and quality measures, insurers and hospitals have become interested. Health reform has augmented home visitation programs. Integration with the medical home could reduce duplication of services and fragmentation while synergizing positive outcomes.47

School health, another area of ACA emphasis, has the potential to improve Healthcare Effectiveness Data and Information Set (HEDIS) quality measures, such as the well-adolescent visit rate, by accessing youth in schools. Integrated school health can improve immunization rates, augment chronic disease management, enhance student health education, and improve school outcomes.⁴⁸

BECOME LITERATE ON HEALTH LITERACY

Health literacy is defined as the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions. 49 Some studies report that health literacy may be a stronger predictor of health than race/ethnicity, income, employment, and education level. 50 Addressing health literacy is critical for patient-centered, equitable, and safe care and involves improving patient and parent communication with clinicians, increasing knowledge

about the health care system, reducing language barriers, and understanding health beliefs.¹

The Agency for Healthcare Research and Ouality (AHRO) Health Literacy Universal Precautions Toolkit⁵¹ and the American Medical Association's Health Literacy and Patient Safety Kit⁴⁹ (Table 1) include instructional videos and a variety of tools to assess clinician communication skills with low-literacy patients and assess patient-friendly office processes. AHRQ discusses 4 areas: spoken communication, written communication, patient self-management and empowerment, and supportive systems. 49 Checklists assess each of these areas and the toolkits offer practical strategies.

Recommendations to improve communication include slowing down, avoiding jargon, and using the "teach-back" technique. Teach-back is a method for clinicians to check whether they have adequately explained information in a manner that the patient understands. This method is 1 of the top 11 evidencebased patient safety practices identified by AHRO,52 and research demonstrates that teach-back can improve retention of information, communication, and patient health outcomes. 53-55 It involves asking, "I want to be sure I explained everything clearly. Can you explain it back to me so I can be sure I did?" or "We've gone over a lot of information. In your own words, please review with me what we talked about."56 Training videos and assessment tools can be found online (Table 1; www. teachbacktraining.org).

DELVE INTO YOUR UNCONSCIOUS BIASES

A study performed using the Implicit Association Test (IAT), a measure of implicit social cognition, found that unconscious preferences and stereotypes are commonplace.⁵⁷ Acknowledging that everyone has preferences and conscious or

unconscious biases, it is important for clinicians to assess their implicit biases and explore how they affect behavior and treatment of patients. The free IAT assesses unconscious biases on a variety of characteristics such as race/ethnicity, gender, age, and weight status (https://implicit. harvard.edu/implicit).⁵⁸ The literature has found an association between clinician race/ethnicity IAT results and their patient care decisions.⁵⁹⁻⁶¹

ENSURE A CULTURE OF EQUITY IN THE WORKPLACE

The AAP policy on "Enhancing the Pediatric Workforce Diversity and Providing Culturally Effective Pediatric Care" discusses the value of regular clinician self-reflection, selfknowledge, and self-critique to ensure cultural competence. For quality and safety, linguistic competency must also be ensured.^{62,63} The AAP Culturally Effective Toolkit⁶⁴ is a practical, hands-on resource to assist clinicians and their office staff, including tips for busy practices: (1) have staff reflect the diversity of the patient population, (2) know community resources available for racial/ethnic or immigrant groups, (3) ask about nontraditional treatments, (4) consider group visits for families with limited English proficiency, and (5) plan extra time for patients requiring interpreters.

ADVOCATE FOR EFFORTS THAT ADDRESS ROOT CAUSES OF HEALTH DISPARITIES

Health disparities are rooted in social and environmental conditions outside of the health care system. Clinicians must add their voice to child advocacy efforts ensuring affordable, quality health care, child care, education, housing, nutritious food, family supports, and guarantees of a living wage. The AAP tracks state legislative actions on many poverty-related policies and lists state commissions and potential coalition partners (Table 1). Child advocacy or medical associations, community

organizations, and AAP chapters can be powerful agents of change.

SUMMARY

Clinicians play a critical role in diagnosing, addressing, and eliminating the conditions that cause health disparities. Clinician and staff provision of culturally effective care requires periodic assessment. Evidence-based practices can guide improvements. Health system investment in practice approaches to address social determinants of health offer promise to improve population health and ensure health equity.

ABBREVIATIONS

AAP: American Academy of Pediatrics ACA: Affordable Care Act

AHRQ: Agency for Healthcare Research and Quality

CLAS: culturally and linguistically appropriate services

IAT: Implicit Association Test QI: quality improvement SES: socioeconomic status

REFERENCES

- Cheng TL, Dreyer BP, Jenkins RR. Introduction: child health disparities and health literacy. *Pediatrics*. 2009;124 (suppl 3):S161–S162
- 2. Flores G; Committee On Pediatric Research. Technical report—racial and ethnic disparities in the health and health care of children. *Pediatrics*. 2010; 125(4). Available at: www.pediatrics.org/cgi/content/full/125/4/e979 doi:10.1542/peds.2010-0188
- Braveman P, Barclay C. Health disparities beginning in childhood: a life-course perspective. *Pediatrics*. 2009;124(suppl 3): \$163-\$175
- Truong M, Paradies Y, Priest N. Interventions to improve cultural competency in healthcare: a systematic review of reviews. *BMC Health Serv Res*. 2014:14:99
- 5. Kawachi I, Subramanian SV, Almeida-Filho N. A glossary for health

- inequalities. *J Epidemiol Community Health*. 2002;56(9):647–652
- Bloom B, Cohen RA, Freeman G. Summary health statistics for U.S. children: National Health Interview Survey, 2010. National Center for Health Statistics. Vital Health Stat. 2011;10(250)
- NCQA Patient-Centered Medical Home. Washington, DC: National Committee for Quality Assurance; 2014. Available at www.ncqa.org/Portals/0/Programs/ Recognition/PCMH/PCMH-2014_Brochureweb-1.pdf. Accessed May 1, 2015
- Tollman S. Community oriented primary care: origins, evolution, applications. Soc Sci Med. 1991;32(6):633–642
- National Commission on Community
 Health Services. Health Is a Community
 Affair: Report of the National
 Commission on Community Health
 Services (NCCHS). Cambridge, MA:
 Harvard University Press; 1967
- Folsom Group. Communities of solution: the Folsom Report revisited. Ann Fam Med. 2012;10(3):250–260
- National Cultural and Linguistic Competency Standards. Washington, DC: U.S. Department of Health and Human Services, Office of Minority Health; 2013. Available at www.thinkculturalhealth.hhs. gov/Content/clas.asp. Accessed May 1, 2015
- Chin MH, Alexander-Young M, Burnet DL. Health care quality-improvement approaches to reducing child health disparities. *Pediatrics*. 2009;124(suppl 3): S224—S236
- 13. Quality Improvement Interventions to Address Health Disparities. Rockville, MD: Agency for Healthcare Research and Quality; 2014. www.ahrq.gov/research/ findings/evidence-based-reports/ gapdisptp.html. Accessed May 1, 2015
- Creating a patient and family advisory council: a toolkit for pediatric practices. Boston, MA: National Initiative for Children's Healthcare Quality; 2012. Available at: www.nichq.org/resources/ PFAC-toolkit-landingpage.html. Accessed November 30, 2014
- 15. Aligning Forces for Quality. Engaging patients in improving ambulatory care: a compendium of tools from Maine, Oregon, and Humboldt County, California. Princeton, NJ: Robert Wood Johnson Foundation; 2013. Available at: www.rwjf.org/en/research-publications/find-rwjf-

- research/2013/03/engaging-patients-inimproving-ambulatory-care.html. Accessed November 30, 2014
- 16. Fine A, Kotelchuck M. Rethinking maternal child health: the Maternal Child Health life course model as an organizing framework. Washington, DC: Maternal and Child Health Bureau; 2010. Available at: mchb.hrsa.gov/lifecourse/ rethinkingmchlifecourse.pdf. Accessed November 30, 2014
- 17. Council on Community Pediatrics and Committee on Native American Child Health. Policy statement—health equity and children's rights. *Pediatrics*. 2010; 125(4):838–849. Available at: www. pediatrics.org/cgi/content/full/125/4/e838
- 18. Robert Wood Johnson Foundation Commission to Build a Healthier America. Time to Act: Investing in the Health of Our Children and Communities. Princeton, NJ: Robert Wood Johnson Foundation. Available at: www.rwjf.org/ commission. Accessed November 30, 2014
- 19. Hood E. Dwelling disparities: how poor housing leads to poor health. *Environ Health Perspect*. 2005;113(5):A310–A317
- 20. Krieger J, Higgins DL. Housing and health: time again for public health action. *Am J Public Health*. 2002;92(5): 758–768
- 21. Kersten EE, LeWinn KZ, Gottlieb L, Jutte DP, Adler NE. San Francisco children living in redeveloped public housing used acute services less than children in older public housing. Health Aff (Millwood). 2014;33(12): 2230–2237
- Fleegler EW, Lieu TA, Wise PH, Muret-Wagstaff S. Families' health-related social problems and missed referral opportunities. *Pediatrics*. 2007;119(6). Available at: www.pediatrics.org/cgi/content/full/119/6/e1332
- 23. Garg A, Butz AM, Dworkin PH, Lewis RA, Thompson RE, Serwint JR. Improving the management of family psychosocial problems at low-income children's wellchild care visits: the WE CARE Project. *Pediatrics*. 2007;120(3):547–558. Available at: www.pediatrics.org/cgi/ content/full/120/3/e547
- 24. Garg A, Butz AM, Dworkin PH, Lewis RA, Serwint JR. Screening for basic social needs at a medical home for low-income children. *Clin Pediatr (Phila)*. 2009;48(1): 32–36

- 25. Gottlieb L, Hessler D, Long D, Amaya A, Adler N. A randomized trial on screening for social determinants of health: the iScreen Study. *Pediatrics* 2014;134(6). Available at: www.pediatrics.org/cgi/ content/full/134/6/e1611
- Garg A, Marino M, Vikani AR, Solomon BS. Addressing families' unmet social needs within pediatric primary care: the health leads model. *Clin Pediatr (Phila)*. 2012; 51(12):1191–1193
- Garg A, Sarkar S, Marino M, Onie R, Solomon BS. Linking urban families to community resources in the context of pediatric primary care. *Patient Educ* Couns. 2010;79(2):251–254
- Health Leads. Boston, MA: Health Leads. Available at: www.healthleadsusa.org. Accessed November 14, 2011
- CAP4Kids: The Children's Advocacy Project of America. 2005. Available at: cap4kids.org/whatiscap4kids.html. Accessed November 30, 2014
- Cheng TL, Solomon BS. Translating life course theory to clinical practice to address health disparities. Matern Child Health J. 2014;18(2):389–395
- Minkovitz C, Strobino D, Hughart N, Scharfstein D, Guyer B; Healthy Steps Evaluation Team. Early effects of the healthy steps for young children program. Arch Pediatr Adolesc Med. 2001;155(4):470–479
- 32. Johnston BD, Huebner CE, Anderson ML, Tyll LT, Thompson RS. Healthy steps in an integrated delivery system: child and parent outcomes at 30 months. Arch Pediatr Adolesc Med. 2006;160(8): 793–800
- 33. Minkovitz CS, Hughart N, Strobino D, et al. A practice-based intervention to enhance quality of care in the first 3 years of life: the Healthy Steps for Young Children Program. JAMA. 2003;290(23): 3081–3091
- 34. Johnston BD, Huebner CE, Tyll LT, Barlow WE, Thompson RS. Expanding developmental and behavioral services for newborns in primary care; effects on parental well-being, practice, and satisfaction. *Am J Prev Med.* 2004;26(4): 356–366
- 35. Mendelsohn AL, Mogilner LN, Dreyer BP, et al. The impact of a clinic-based literacy intervention on language development in inner-city preschool

- children. *Pediatrics*. 2001;107(1). Available at: www.pediatrics.org/cgi/content/full/107/1/e130
- 36. High PC, LaGasse L, Becker S, Ahlgren I, Gardner A. Literacy promotion in primary care pediatrics: can we make a difference? *Pediatrics*. 2000;105(4 pt 2 suppl3):927–934
- Golova N, Alario AJ, Vivier PM, Rodriguez M, High PC. Literacy promotion for Hispanic families in a primary care setting: a randomized, controlled trial. Pediatrics. 1999;103(5 Pt 1):993–997
- National Center for Medical Legal Partnership. Washington, DC. Available at: http://medical-legalpartnership.org. Accessed November 30, 2014
- 39. Fiese BH, Rhodes HG, Beardslee WR. Rapid changes in American family life: consequences for child health and pediatric practice. *Pediatrics*. 2013; 132(3). Available at: www.pediatrics.org/ cgi/content/full/132/3/e552
- Schor EL; American Academy of Pediatrics Task Force on the Family. Family pediatrics: report of the Task Force on the Family. *Pediatrics*. 2003; 111(6 Pt 2):1541–1571
- 41. Hagan JF, Shaw JS, Duncan PM, Eds. Bright Futures Guidelines for Health Supervision of Infants, Children, and Adolescents. 3rd Ed. Elk Grove Village, IL: American Academy of Pediatrics, 2008
- 42. Committee on Environmental HealthHealth; Committee on Substance Abuse; Committee on Adolescence; Committee on Native American Child. From the American Academy of Pediatrics: Policy statement—Tobacco use: a pediatric disease. *Pediatrics*. 2009; 124(5). Available at: www.pediatrics.org/cgi/content/full/124/5/e1474
- 43. Earls MF, Committee on Psychosocial Aspects of Child and Family Health American Academy of Pediatrics. Incorporating recognition and management of perinatal and postpartum depression into pediatric practice. *Pediatrics*. 2010;126(5). Available at: www.pediatrics.org/ogi/content/full/126/5/e1032
- 44. Thackeray JD, Hibbard R, Dowd MD; Committee on Child Abuse and Neglect; Committee on Injury, Violence, and Poison Prevention. Intimate partner violence: the role of the pediatrician. Pediatrics. 2010;125(5). Available at:

- www.pediatrics.org/cgi/content/full/125/5/e1094
- 45. Johnson K, Posner SF, Biermann J, et al; CDC/ATSDR Preconception Care Work Group; Select Panel on Preconception Care. Recommendations to improve preconception health and health care—United States: a report of the CDC/ATSDR Preconception Care Work Group and the Select Panel on Preconception Care. MMWR Recomm Rep. 2006;55(RR-6):1–23
- 46. Cheng TL, Kotelchuck M, Guyer B. Preconception women's health and pediatrics: an opportunity to address infant mortality and family health. Acad Pediatr. 2012;12(5):357–359
- Tschudy MM, Toomey SL, Cheng TL. Merging systems: integrating home visitation and the family-centered medical home. Pediatrics. 2013;132(suppl 2):S74–S81
- 48. Knopf J. School-Based Health Centers for the Improvement of Health Equity: A Community Guide Systematic Review, Centers for Disease Control and Prevention. Available at: www.sbh4all.org/ session-materials/#sthash.23D47eQa.dpuf. Accessed August 20, 2015
- Institute of Medicine. Health Literacy: A Prescription to End Confusion. Washington, DC: National Academies Press; 2004
- 50. Weiss BD. Health literacy and patient safety: Help patients understand manual for clinicians, 2nd Ed. American Medical Association Foundation and American Medical Association; 2007. Available at: med.fsu.edu/userFiles/file/ahec_health_ clinicians_manual.pdf. Accessed November 16, 2014
- 51. DeWalt DA, Callahan LF, Hawk VH, et al. Health Literacy Universal Precautions Toolkit. North Carolina Network Consortium, The Cecil G. Sheps Center for Health Services Research, The University of North Carolina at Chapel Hill, under contract no. HHSA290200710014. AHRQ Publication 10-0046-EF. Rockville, MD: Agency for Healthcare Research and Quality; 2010
- 52. Making Health Care Safer: An Updated Critical Analysis of the Evidence for Patient Safety Practices. Rockville, MD: Agency for Healthcare Research and Quality Report. Available at: www.ahrq. gov/research/findings/evidence-based-reports/ptsafetyuptp.html. Accessed November 30, 2014

- 53. White M, Garbez R, Carroll M, Brinker E, Howie-Esquivel J. Is "teach-back" associated with knowledge retention and hospital readmission in hospitalized heart failure patients? *J Cardiovasc Nurs*. 2013;28(2):137–146
- 54. Kornburger C, Gibson C, Sadowski S, Maletta K, Klingbeil C. Using "teach-back" to promote a safe transition from hospital to home: an evidence-based approach to improving the discharge process. *J Pediatr Nurs*. 2013;28(3):282–291
- Schillinger D, Piette J, Grumbach K, et al. Closing the loop: physician communication with diabetic patients who have low health literacy. *Arch Intern Med.* 2003;163(1):83–90
- Always Use Teach-back! Teach-Back Training. Available at: www. teachbacktraining.org. Accessed November 30, 2014

- Nosek BA, Smyth FL, Hansen JJ, et al. Pervasiveness and correlates of implicit attitudes and stereotypes. Eur Rev Soc Psychol. 2007;18(1):36–88
- Project Implicit. Cambridge, MA: 2011.
 Available at: implicit.harvard.edu/implicit/index.jsp. Accessed November 30, 2014
- 59. Cooper LA, Roter DL, Carson KA, et al. The associations of clinicians' implicit attitudes about race with medical visit communication and patient ratings of interpersonal care. Am J Public Health. 2012;102(5):979–987
- 60. Chapman EN, Kaatz A, Carnes M.
 Physicians and implicit bias:
 how doctors may unwittingly
 perpetuate health care disparities. *J Gen Intern Med.* 2013;28(11):
 1504—1510
- 61. Green AR, Carney DR, Pallin DJ, et al. Implicit bias among physicians and

- its prediction of thrombolysis decisions for black and white patients. *J Gen Intern Med.* 2007;22(9):1231–1238
- Flores G, Abreu M, Olivar MA, Kastner B. Access barriers to health care for Latino children. Arch Pediatr Adolesc Med. 1998;152(11):1119–1125
- 63. Flores G, Laws MB, Mayo SJ, et al. Errors in medical interpretation and their potential clinical consequences in pediatric encounters. *Pediatrics*. 2003; 111(1):6–14. Available at: www. pediatrics.org/cgi/content/full/111/1/e6
- 64. Cora-Bramble D, Schaefer DM. Culturally Effective Care Toolkit. Elk Grove Village, IL: American Academy of Pediatrics; 2011. Available at: www.aap.org/en-us/professional-resources/practice-support/Patient-Management/Pages/Culturally-Effective-Care-Toolkit.aspx. Accessed November 30, 2014

Disparities in Health Care Cases

A day in continuity clinic...

You are reviewing your schedule for the afternoon and you notice that your 1300 routine well visit has not checked in yet. The patient, Tai, is a 6-year-old with poorly controlled eczema and moderate persistent asthma who was last seen in clinic approximately one year ago for a well-child check. The family was listed as a 'no show' for their follow-up appointment, which was scheduled to further discuss their asthma action plan. Upon

further chart review, you notice that there have been several missed visits in the past for asthma and eczema follow-up and that the patient's medications have not been refilled in several months. You proceed with the rest of your clinic, and while you are finishing up with your 1400 patient, you realize that this patient was just checked in. What are your initial thoughts when preparing to see this family? The patient is finally screened and brought into the room at 1450 and you notice that they are accompanied by a parent and 2 younger siblings. The screener reports that the family was unable to complete the screening questionnaires due to tardiness.

Do you have any thoughts about what race or nationality this family might be? What about their socioeconomic status? What is the parent's gender? How is the parent dressed? What does the parent sound like? What aspects of what you think and how you feel about this family have the potential to positively or negatively impact the care you provide them?

What social determinants of health may positively or adversely impact their ability to "comply" with their health management plan?

Your next patient, Rosa, scheduled for 1500, is a 14yo here with their retired O6 sponsor. They come annually for visits, but this is your first time seeing them and they need sports physical forms signed. You read that the patient is a freshman in high school, plays soccer, and was reportedly considering a career in medicine per their last visit one year ago.
What are your initial thoughts when preparing to see this family?
Discuss biases about children of officer sponsors.Any thoughts about the patient's activities or preferred career path?

You apologize for the wait and begin your clinic visit. The parent is very friendly, complimenting you on your excellent choices to become a physician AND serve your country. The child has no significant past medical history, negative ROS on the intake form, normal vitals, and normal growth curves. You perform a routine physical exam, clear them for sports, and tell them you look forward to seeing them in a year.

What is the patient's gender?

What is the patient's body habitus?

Do you have any thoughts about what race or nationality this family might be?

What is the parent's gender?

How is the parent dressed?

What does the parent sound like?

Should you have done a HEADSSS exam?

Would your race and/or gender affect how you perceive the parent's compliment?

- If you were of the same race vs a different race
- If you were of the same gender vs a different gender



Being an Active Bystander

STRATEGIES FOR CHALLENGING THE EMERGENCE OF BIAS

THE KIRWAN INSTITUTE FOR THE STUDY OF RACE & ETHNICITY | AUTHOR: LENA TENNEY

"When we speak we are afraid our words will not be heard or welcomed. But when we are silent, we are still afraid. So it is better to speak." —Audre Lorde

Thank you for your commitment to challenging explicit and implicit bias. It can be difficult to know what to say when a family member, friend, colleague, acquaintance, or stranger makes problematic comments. However, we will only be able to dismantle oppression in its overt forms if we are brave enough to challenge bias in even its most common forms. The Kirwan Institute invites you to utilize these strategies to empower yourself to speak out in response to bias.

Individuals can be active bystanders when faced with the emergence of bias in interpersonal interactions. These suggestions encompass a variety of approaches to opening a conversation about bias. There is not a one-size-fits-all solution to challenging every manifestation of bias. Consider which strategy or strategies might be most effective based upon situational context, as well as your own strengths.

There is a difference between calling someone in (inviting continued discussion and learning) and calling someone out (shutting down the conversation). Both approaches are valid, yet might be more or less effective in various circumstances. The goals of these strategies are to educate people and invite them to do better, rather than to criticize or ostracize them, thereby addressing the situation while avoiding making the person defensive.

Strategies for Speaking Out

- Use humor.
 - "What are you?" "Human! How about you?"
 - "Your English is so good!" "I should hope so since it's the language I've been speaking my entire life!"
- Be literal or refuse to rely on the assumption being made.
 - "Let's powwow!" "I don't think we have time to plan a whole powwow, but I'm willing to have a quick meeting."
 - o "That's just the way those people are, you know?" "Actually I don't know what you mean by that. I've met a lot of people in that group and they're all unique individuals."
 - o "I don't get the joke. Can you explain it to me?"
- · Ask questions that invite discussion.
 - "What do you mean when you say that?"



- o "Do you know what that phrase actually means and where it came from? Most people have no idea that it actually has an offensive origin/meaning."
- "Can you explain your thought process to me? I want to be sure I understand how we reached such different conclusions."

State that you are uncomfortable.

- o "That phrase makes me uncomfortable. Could you please not use it around me?"
- o "Assumptions about an entire group of people make me uncomfortable. I don't think that we can take that assumption for granted or make our decisions based off of it."

Create a conversation speedbump.

- o "I'm not an expert, but my understanding is that that language is outdated. Does anyone know what might be a better way to phrase that? If not, I'll try to Google it."
- o "I'm not sure what I think about that. I'm going to have to think about that more."
- "I don't know how I feel about that..."
- "Ouch!" "Whoa!" "Excuse me?!" or "Seriously?!"

Use direct communication.

- o "That kind of language is not appropriate in the workplace."
- "When we say that people who are nearing retirement shouldn't be promoted to this position because they might not be as dedicated at this point in their career, I worry we aren't being fair to older employees. That assumption doesn't take into account every individual's circumstances and work ethic, so can we please make sure we aren't relying on it when deciding who to consider for the position?"
- o "I know you aren't intending to stereotype anyone, but as your friend I wanted to let you know that what you said could easily be interpreted that way. Since I know you're a good person who cares about others, I would hate for you to accidentally say it again without realizing how it can come across."

Remind people of personal and/or institutional values.

- o "I know you want to be an ally, and that's exactly why I wanted to check in about your comment. I know I would want someone to tell me if I accidentally messed up."
- o "You're new so maybe you haven't been told yet, but we don't talk about women like that here."
- "Clearly we have different personal opinions about this topic. Regardless, the handbook/code of conduct/non-discrimination policy does say that we do not discriminate/treat people differently/talk like that."

Remove yourself from the conversation.

- "This conversation is no longer productive, so I am ending it."
- "We have this same fight every holiday gathering. Clearly we're not going to change each other's minds. I won't agree to disagree because people's humanity is too important for that, but I will ask that we not have this fight right now. Can we please enjoy family time together instead?"

Additional Resources

- Engage with the virtual training, "Did They Really Just Say That?! Being an Active Bystander"
 - http://kirwaninstitute.osu.edu/active-bystander-training/

Disparities in Health Care Quiz

- 1. What is meant by health equity?
 - a. All patients, regardless of their race or ethnicity, receive the same care.
 - b. Health care is delivered in a way to guarantees equal outcomes for each patient.
 - c. All patients, regardless of their race or ethnicity, receive the highest-quality care.
 - d. All patients receive health care from culturally competent providers.
- 2. Health disparity refers to inequalities thought to be unfair, unjust, and avoidable. Which of the following factors can contribute to health disparities?
 - a. Universal access to care
 - b. Diversity among healthcare providers
 - c. Social determinants of health
 - d. Cultural humility
- 3. Which of the following terms refers to the tendency to favor one group over another?
 - a. Prejudice
 - b. Stereotype
 - c. Bias
 - d. Microaggression
- 4. Some automatic associations and illness scripts (such as a 16yo Black female presenting to the ER with abdominal pain) taught in medical training are examples of which of the following?
 - a. Prejudice
 - b. Stereotype
 - c. Bias
 - d. Microaggression
- 5. Which of the following is NOT an example of implicit

bias?

- a. An automatic preference
- b. A negative belief that is suppressible
- c. A positive or negative unconscious attitude
- d. A bias that is acknowledged by the individual
- 6. What is the main difference between implicit and explicit biases?
 - a. Implicit biases are more likely to be negative.
 - b. Explicit bias is more harmful.
 - c. Implicit preferences tend to engage automatic processing (fast thinking) while explicit preferences are more deliberate (slow thinking).
 - d. People can recognize when someone is acting on explicit bias, but actions based on implicit bias are too subtle to notice.