

## Implicit bias in health care

*“Of all forms of inequity, injustice in health care is the most shocking and inhuman.”*  
— Martin Luther King, Jr., National Convention of the Medical Committee  
for Human Rights, Chicago, 1966

### Issue:

On the eve of the 15th anniversary of two seminal reports from the Institute of Medicine (IOM) – *Crossing the Quality Chasm*<sup>1</sup> and *Unequal Treatment*<sup>2</sup> – we find that racial and socioeconomic inequity persists in health care. In *Crossing the Quality Chasm*, the IOM stressed the importance of equity in care as one of the six pillars of quality health care, along with efficiency, effectiveness, safety, timeliness and patient-centeredness. Indeed, *Unequal Treatment* found that even with the same insurance and socioeconomic status, and when comorbidities, stage of presentation and other confounders are controlled for, minorities often receive a lower quality of health care than do their white counterparts.

Professor Margaret Whitehead, head of the World Health Organization (WHO) Collaborating Centre for Policy Research on Social Determinants of Health, perhaps provides the most intuitive and clear definition of health inequalities (the term used in most countries, where it is generally assumed to refer to socioeconomic differences in health). She defines health inequalities as health differences that “are not only unnecessary and avoidable but, in addition, are considered unfair and unjust.” She also states that “equity in health implies that, ideally, everyone should have a fair opportunity to attain their full health potential and, more pragmatically, that no one should be disadvantaged from achieving this potential, if it can be avoided.”<sup>3,4</sup>

There is extensive evidence and research that finds unconscious biases can lead to differential treatment of patients by race, gender, weight, age, language, income and insurance status. The purpose of this issue of *Quick Safety* is to discuss the impact of implicit bias on patient safety. Bias in clinical decision-making does result in overuse or underuse problems that can directly lead to patient harm.

### What is “implicit bias?”

Implicit (subconscious) bias refers to the attitudes or stereotypes that affect our understanding, actions and decisions in an unconscious manner.<sup>13</sup> These biases, which encompass both favorable and unfavorable assessments, are activated involuntarily and without an individual’s awareness or intentional control.<sup>14</sup>

In 1995, Anthony Greenwald and M.R. Benaji hypothesized that our social behavior was not entirely under our conscious control. According to their study, the concept of **unconscious bias (hidden bias or implicit bias)** suggests that “much of our social behavior is driven by learned stereotypes that operate automatically – and therefore unconsciously – when we interact with other people.”<sup>15</sup>

Hidden bias tests measure unconscious, or automatic, biases. An individual’s willingness to examine their own possible biases is an important step in understanding the roots of stereotypes and prejudice in our society. The ability to distinguish friend from foe helped early humans survive, and the ability to quickly and automatically categorize people is a fundamental quality of the human mind. Categories give order to life, and every day, we group other people into categories based on social and other characteristics. This is the foundation of stereotypes, prejudice and, ultimately, discrimination.

Once learned, stereotypes and prejudices resist change, even when evidence fails to support them or points to the contrary. People will embrace anecdotes that reinforce their biases, but disregard experience that contradicts them. The statement “Some of my best friends are \_\_\_\_\_,” captures this tendency to allow some exceptions without changing our bias. Research has demonstrated that biases thought to be absent or

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extinguished remain as "mental residue." Studies show people can be consciously committed to egalitarianism, and deliberately work to behave without prejudice, yet still possess hidden negative prejudices or stereotypes. Studies have found that school teachers clearly telegraph prejudices, so much so that some researchers believe children of color and white children in the same classroom effectively receive different educations. Jerry Kang, vice chancellor for equity, diversity and inclusion, and professor of law at UCLA Law, states: "Automatically, we categorize individuals by age, gender, race and role. Once an individual is mapped into that category, specific meanings associated with that category are immediately activated and influence our interaction with that individual."

Implicit bias develops early in life from repeated reinforcement of social stereotypes. Implicit pro-white bias occurs among children as young as 3-5 years old.<sup>5</sup> The Implicit Association Test (IAT) is a computerized, timed dual-categorization task that measures implicit preferences by bypassing conscious processing.<sup>6</sup> The IAT is part of Project Implicit, a collaborative investigation effort between researchers at Harvard University, University of Virginia, and University of Washington. The studies examine thoughts and feelings that exist either outside of conscious awareness or conscious control. The goal of the project is to make this technique available for education (including self-education) and awareness.

Between October 1998 and October 2006, more than 4.5 million IAT tests were completed on the IAT website. The project found that:

- Implicit bias is pervasive
- People are often unaware of their implicit biases
- Implicit biases predict behavior
- People differ in levels of implicit bias

Many health care organizations have begun administering the IAT, and when it is applied to physicians, significant pro-white bias has been found.<sup>7</sup> However, implicit bias is not limited to race. When the IAT was administered at an obesity conference, participants implicitly associated obese people with negative cultural stereotypes, such as "bad, stupid, lazy and worthless."<sup>8,9</sup> Implicit gender bias among physicians also may unknowingly sway treatment decisions. Women are three times less likely than men to receive knee arthroplasty when clinically appropriate.<sup>10,11,12</sup> One of the stereotypical reasons for this inequity and underuse problem is that men are viewed as being more stoic and more inclined to participate in strenuous or rigorous activity.

This difference in treatment and clinical decision-making, though unintentional, could lead to failures in patient-centered care, interpersonal treatment (e.g., does the doctor care for you), communication (e.g., did the doctor answer my questions), trust (e.g., the clinicians' integrity), and contextual knowledge (e.g., your doctor's knowledge of your values and beliefs). How a physician communicates, his or her body language and verbal cues can be an expression of subconscious bias.

### **Implicit bias and its effect on health care**

Research supports a relationship between patient care and physician bias in ways that could perpetuate health care disparities.<sup>9</sup> What makes implicit bias "frightening" in health and health care is that the result is "unthinking discrimination" of which caregivers are not aware.

Academic researchers, in efforts to explain differences in health outcomes, posit that the reasons include lack of trust, communications problems, or simply "unknown and complex" reasons.<sup>16</sup> A 2011 study conducted by van Ryn et al. concludes that racism can interact with cognitive biases to affect clinicians' behavior and decisions and in turn, patient behavior and decisions (e.g., higher treatment dropout, lower participation in screening, avoidance of health care, delays in seeking help and filling prescriptions, and lower ratings of health care quality).<sup>17</sup> This unconscious or implicit bias indicates many white health care providers harbor a broad racial framing of Americans of color, one that can be causative in their not providing equitable health care.

Some examples of how implicit bias plays out in health care include:

- Non-white patients receive fewer cardiovascular interventions and fewer renal transplants
- Black women are more likely to die after being diagnosed with breast cancer



- Non-white patients are less likely to be prescribed pain medications (non-narcotic and narcotic)
- Black men are less likely to receive chemotherapy and radiation therapy for prostate cancer and more likely to have testicle(s) removed
- Patients of color are more likely to be blamed for being too passive about their health care

Implicit bias is not isolated to adult care. At a well-known academic medical center, a child presented with difficulty breathing that baffled the care team. The team of physicians were agonizing over a light box, reviewing the patient's X-rays, puzzled because they couldn't determine a diagnosis. Another physician just passing through looked at the X-rays and immediately said, "cystic fibrosis." The team was tripped up by the patient's race, which was black, and that the patient had a "white disease."

### Can we overcome implicit bias in health care?

The good news is that with organizational support, skills training, and cognitive resources, clinicians who are highly motivated to control prejudice and bias awareness can successfully prevent racism from affecting the quality of care they provide.<sup>17</sup> Some of the skills (from van Ryn et al.)<sup>17</sup> that help lower racial bias include:

- **Perspective-taking:** The cognitive component of empathy,<sup>17</sup> perspective-taking can reduce bias and inhibit unconscious stereotypes and prejudices. Physician empathy positively affects patient satisfaction, self-efficacy perceptions of control, emotional distress, adherence, and health outcomes.
- **Emotional regulation skills:** Clinicians who have good emotional regulation skills and who experience positive emotion during clinical encounters may be less likely to view patients in terms of their individual attributes, and to use more inclusive social categories. It's easier to empathize with others when people view themselves as being part of a larger group.
- **Partnership-building skills:** Clinicians who create partnerships with patients are more likely to develop a sense that their partner is on the same "team," working toward a common goal.

### Safety Actions to Consider:

In order to ensure best outcomes and zero harm for all patients, implicit bias and racial discrimination in health and health care should be better understood, assessed and corrected. The following recommendations (from van Ryn et al.)<sup>17</sup> should be understood by hospital administrators and clinicians, as well as medical educators and policymakers. In order to begin to address the impact of implicit bias on clinical care decisions, health care organizations should:

- Evaluate the racial climate by evaluating employees' shared perceptions of the policies and practices that communicate the extent to which fostering diversity and eliminating discrimination are priorities in the organization.
- Investigate reports of subtle or overt discrimination and unfair treatment.
- Identify and work to transform formal and informal norms that ignore and/or support racism.
- Establish monitoring systems in which processes and outcomes of care can be compared by patient race. Collecting data on race and other indicators of social position can be used to self-assess, monitor and evaluate the effectiveness of the organization's strategies for eradicating inequities in care.
- Give care units and, where appropriate, individual clinicians, equity-specific targeted feedback. When inequities are found, support creative solutions for remediation and create accountability for improvement.
- Implement work policies and clinical procedures that protect clinicians from high cognitive load and promote positive emotions. When clinicians' cognitive capacity is low or overtaxed, memory is biased toward information that is consistent with stereotypes. High cognitive load can be created by: productivity pressures, time pressure, high noise levels, inadequate staffing, poor feedback, inadequate supervision, inadequate training, high communication load, and overcrowding.
- Promote racial diversity at all levels of the organizational hierarchy and support positive intergroup contact. Intergroup contact can reduce intergroup prejudice and help reduce feelings of interracial anxiety. Additionally, institutional support for interaction can increase the benefits of intergroup contact.
- Implement and evaluate training that ensures that clinicians have the knowledge and skills needed to prevent racial biases from affecting the quality of care they provide. The training should cover self-awareness regarding implicit biases, and skills related to perspective-taking, emotional regulation, and partnership-building.<sup>17</sup>



Actions that health care providers can take to combat implicit bias, include:

- Having a basic understanding of the cultures from which your patients come.
- Avoiding stereotyping your patients; individuate them.
- Understanding and respecting the magnitude of unconscious bias.
- Recognizing situations that magnify stereotyping and bias.
- Knowing the National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care (the [National CLAS Standards](#)).
- Performing “teach back (e.g., the National Patient Safety Foundation’s “Ask Me 3®” educational program).<sup>18</sup>
- Assiduously practicing “evidenced-based medicine.”
- Using techniques to de-bias patient care, which include training, intergroup contact, perspective-taking, emotional expression, and counter-stereotypical exemplars.

Resources:

1. Institute of Medicine, Committee on Quality of Health Care in America. Crossing the Quality Chasm: A New Health System for the 21<sup>st</sup> Century. Washington, DC: National Academy Press. 2001.
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  17. van Ryn M, et al. The impact of racism on clinician cognition, behavior, and clinical decision making. Du Bois Review. 8:1(2011):199-218.
  18. National Patient Safety Foundation. [Ask Me 3®](#): Good questions for your good health Web page. 2016.
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Note: This is not an all-inclusive list.



Legal disclaimer: This material is meant as an information piece only; it is not a standard or a *Sentinel Event Alert*. The intent of *Quick Safety* is to raise awareness and to be helpful to Joint Commission-accredited organizations. The information in this publication is derived from actual events that occur in health care.