We cannot achieve the change we seek without first becoming aware that a change is necessary.

Bias is state of mind tightly woven into our preexisting psychosocial fabric. I am proud of the work being done by the AAFP Center for Diversity and Health Equity to help our members serve others by creating the Implicit Bias Training program.

I sincerely hope our members will use this innovative tool to objectively expand their awareness of how implicit bias can be the least obvious but most devastating social determinant of health outcomes.

– Gary L. LeRoy, MD, FAAFP
AAFP President 2019–2020
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Patients
Rosie Bartel; Stephen T. Hale; Kyle Schuessler

CONTACT US
If you have questions regarding this training program or other diversity, health equity, and inclusion initiatives at the AAFP, please contact:

Center for Diversity and Health Equity
11400 Tomahawk Creek Parkway | Leawood, KS 66211
Office: (913) 906-6319
healthequity@aafp.org
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SECTION 1: Overview

PLEASE NOTE:
This section corresponds with the “Overview” PowerPoint presentation available online at www.aafp.org/implicit-bias.

Implicit bias, defined as, “the attitudes or stereotypes that affect our understanding, actions, and decisions in an unconscious manner,” is a contributing factor to health disparities.¹ Family physicians should make an effort to explore their own implicit biases so they can identify unconscious decisions and actions that may negatively affect the communities they serve.

Common types of implicit bias include the following²:

- **Affinity** – Preference for people who share qualities with you or someone you like
- **Anchoring** – Tendency to rely too heavily on the first piece of information offered when you are making decisions
- **Attribution** – Tendency to attribute other people’s successes to luck or help from others and attribute their failures to lack of skill or personal shortcomings
- **Beauty** – Assumptions about people’s skills or personality based on their physical appearance and tendency to favor people who are more attractive
- **Confirmation** – Selective focus on information that supports your initial opinion(s)
- **Conformity** – Tendency to be swayed too much by the views of other people
- **Contrast** – Assessment of two or more similar things by comparing them with one another rather than looking at their individual merits
- **Gender** – Preference for one gender over the other
- **Halo** – Focus on one particularly positive feature about a person that clouds your judgement
- **Horns** – Focus on one particularly negative feature about a person that clouds your judgement

The American Academy of Family Physicians (AAFP) recommends educating physicians about implicit bias and strategies to address it to support culturally appropriate, patient-centered care and reduce health disparities.¹

Gaps in Medical Education

Research has shown that implicit bias is pervasive among all health care professionals and has deleterious effects on patient health.³ However, formal medical education and training curricula are often void of content that provides a framework for identifying and mitigating implicit bias in clinical practice. Faculty who actively seek to incorporate this topic in training often face barriers, such as a limited number of subject matter experts who can provide instruction.⁴⁵ Health care professionals also lack opportunities to demonstrate bias mitigation strategies in practice or to engage with patients who can share experiences of encountering implicit bias in clinical settings.⁴⁶⁷
The Need for Implicit Bias Training

To achieve health equity and reduce disparity in health outcomes, particularly those that are the result of interactions with the health care system, health care professionals need to know the following:

- The pervasiveness of implicit bias among all health care professionals\(^5\)
- The purpose of implicit bias self-assessments and how to use them, including how to interpret the results\(^5,7\)
- How to interpret findings of implicit bias research\(^6\)
- How implicit bias affects patients and their interactions with health care professionals\(^4\)
- How to apply techniques for mitigating the effects of implicit bias\(^3,7,8\)

Goals of Implicit Bias Training

Implicit bias training should be viewed as one component of an organization’s widespread, overarching strategy for implementing structural and institutional changes to achieve equitable health outcomes for its community. The primary goals of this training are:

- To promote awareness of implicit bias among all members of the health care team
- To provide resources for moderating the negative effects of implicit bias on patient care

Core training components include an overview of what implicit bias is and how it operates (specifically in the health care setting); tools for self-assessment; and strategies that can be used to reduce bias within the clinic and/or health care system.

This course includes prework that should be completed online by participants prior to the first session. In-person training activities include self-assessments, case studies, small-group discussions, and development of conscious mitigation strategies to overcome implicit bias. Based on the preferences of your organization, these activities can be conducted as a full-day training event or as a series that focuses on individual sections (or combinations of sections) over a number of training sessions.

All training materials, including videos, PowerPoint presentations, and additional resources, are available online at www.aafp.org/implicit-bias.

Learning Objectives

- Increase self-awareness by reflecting on the results of the implicit bias self-assessment
- Demonstrate conscious mitigation strategies to overcome implicit bias
- Apply implicit bias reduction skills to case studies
- Understand the effect of implicit bias on real-life patients

Standards of Conduct

Individuals who use these implicit bias training materials are viewed as AAFP representatives. The AAFP expects its faculty to meet high ethical standards and to personify the ideals represented by the organization. Professionalism is the standard of conduct for the AAFP, and each member of the AAFP community has a responsibility to act with integrity, compassion, and respect for others. Honoring this responsibility and being accountable constitute the essence of professionalism.
Facilitators and learners should be mindful of the following when participating in implicit bias training:

- The AAFP opposes all discrimination in any form, including, but not limited to, that on the basis of actual or perceived race, color, religion, gender, sexual orientation, gender identity, ethnic affiliation, health, age, disability, economic status, body habitus, or national origin.
- All participants should avoid voicing political opinions, stereotypes, jokes, or comments that could be perceived as offensive. At times, you may feel an impulse to lighten a topic. However, following live activities, learners often report that they did not appreciate jokes, especially those that are political in nature.
- Learners will likely include advanced practice professionals, nurses, and physicians from other specialties. Please keep this in mind as you make references.

Framework

This training is based on a six-part actionable framework for integrating implicit bias awareness and management into health professional education (Figure 1).

Figure 1. Framework for integrating implicit bias awareness and management into health professional education

IAT = implicit association test.

Implicit bias training should be used as part of an ongoing individual and organizational commitment to change, not as a “check the box” compliance activity.
Target Audiences

Learners should come prepared with some fundamental knowledge of what implicit bias is and how it impacts health outcomes. This training is designed to increase learner competence while creating an environment that supports self-reflection and personal growth. It has been developed with primary care physicians and their practice teams in mind. However, it can be used by all health care and mental health professionals, especially those providing care to patients who may be at greater risk of exposure to implicit bias because of the following:

- Age
- Body habitus
- Color
- Disability
- Economic status
- Gender identity
- Immigration status
- Mental health
- Nationality
- Race/Ethnicity
- Religion
- Sexual orientation

Course Evaluation

At the end of the course, you will ask learners to reflect on the training and provide feedback. A customizable CME Activity Evaluation Form from the AAFP is available online at www.aafp.org/cme/creditsys/about/tools.html#templates.

FACILITATOR TIP

Be sure that you provide sufficient time so learners don’t feel rushed. Also, be aware that the types of health care professionals in the group may have varying levels of power and influence. With this in mind, attempt to create an environment where everyone’s voice and opinions are heard and valued.

Learner Activity: Implicit Bias Pop Quiz

In this activity, you will address some common misconceptions by countering false statements with facts about implicit biases and the effectiveness of implicit bias training. You may allow time for learners to share other opinions they have heard so that you can provide clarification or point them to one of the recommended readings for further reference.
SECTION 2: Course Prework for Learners

Learner Activity: Implicit Association Test

The Implicit Association Test (IAT) (available online at https://implicit.harvard.edu/implicit/takeatest.html) is a series of free, publicly available computer-based exercises developed by Project Implicit®, a long-term research project based at Harvard University. The test asks participants to associate words with images to assess participants’ automatic associations between concepts by measuring the time and latency of their responses. While the IAT is considered more reliable and valid than survey evaluations, it is designed to be used as a prompt to trigger self-reflection, discussion, and awareness of personal biases, not as a metric for measuring implicit bias or evaluating curricular outcomes.

The following IATs are available online:
- Age
- Arab-Muslim
- Asian
- Disability
- Gender-Career
- Gender-Science
- Native
- Presidents
- Race
- Religion
- Sexuality
- Skin-tone
- Weapons
- Weight

Select one of these tests and have all learners complete it online before the course begins. During the training session, you will use the discussion questions on Page 14 to facilitate a conversation about the learners’ results.

Learner Activity: Self-Evaluation Forms

Two self-evaluation forms are provided in the participant guide to help learners evaluate their susceptibility to relying on implicit bias and their orientation toward bias mitigation strategies. One form is designed for use by clinicians and the other is designed for use by health educators. During the training session, you can invite learners to share and discuss their self-evaluations in the context of their IAT results, if time allows.

Before the course begins, each learner should complete the appropriate form in the participant guide. The forms are also available online at www.aafp.org/implicit-bias.

The self-evaluation forms are made available with the permission of The Ohio State University Kirwan Institute for The Study of Race and Ethnicity. Please note that the forms are not intended for use as a formal metric of performance; instead, they are created for individual use by those seeking to mitigate implicit bias and increase their capacity for introspection and reflection.
SECTION 3:
Creating a Safe and Inclusive Learning Environment

PLEASE NOTE:
This section corresponds with the “Creating a Safe and Inclusive Learning Environment” PowerPoint presentation available online at www.aafp.org/implicit-bias.

Training sessions focused on bias, stereotypes, racism, and privilege pose some risks for both learners and facilitators because individuals are asked to disclose and confront attitudes and beliefs that they feel are socially unacceptable, especially among health care professionals. These risks are magnified for faculty who may feel that their personal identity inhibits their ability to provide effective training. To create a safe and welcoming environment for learners, faculty conducting implicit bias training must be secure in their level of expertise. Regardless of their identity, faculty should be seen by learners as approachable, nonthreatening, open minded, inspiring, knowledgeable, and encouraging. When uncomfortable situations arise and powerful emotions such as defensiveness, shame, and fear emerge, a facilitator who openly addresses the discomfort and proactively avoids reinforcing these feelings will help enrich the learning experience.

Facilitators may experience pressure to role model skills, demonstrate strong content knowledge, and navigate unforeseen challenges during training with ease. Faculty are chosen based on their background, identity, and past personal experience discussing implicit bias. However, it is important to set the expectation that everyone, including facilitators, can learn more about this topic. Learners should be empowered to participate actively in the training session. While faculty can create the learning experience, the entire group is responsible for conducting critical reflection and guiding the discourse.

Learner Activity: Identity Signs

Developed by The Safe Zone Project, the Identity Signs activity encourages participants to reflect on their own social identities and gives them an opportunity to learn from each other. This level of understanding and connection among learners helps to foster the safe, inclusive environment necessary to proceed to the more challenging elements of implicit bias training.

Setup

1) Print out an identity sign for each of the following:
   - Sexual Orientation
   - Race
   - Gender Identity
   - Class
   - Biological Sex
   - National Origin
   - Immigration Status

2) Hang up the identity signs around the room or place the signs on tables as tents.

3) Ensure the room is set up in such a way that participants can easily move around the room to stand under the different signs or near the tabletop signs.

The Safe Zone Project offers the Identity Signs activity and other free online resources at https://thesafezoneproject.com/.
Goals and Learning Outcomes

• To create a space for participants to talk about their experiences and their identities in a more personal way than they might otherwise
• To provide an opportunity for participants to learn directly from each other
• To highlight that people with similar identities can experience different levels of salience and self-awareness, and can be differently impacted by their intersecting identities
• To talk about how we experience our identities on a day-to-day basis
• To highlight how everyone may experience pain, ostracism, or discrimination, yet feel it within the context of different identities

Process Steps

1) Frame the activity for learners:

• If you hang identity signs around the room:
  Say, “We are going to be doing an activity now that requires us to move around the room. I’m going to read a statement and then you’re going to answer that statement by placing yourself under one of the signs that I’ve hung up around the room. The statements relate to your experience of these identities. We’ll then have a chance to talk in small groups and reflect as a large group. This activity is a way to explore the parts of your identity that give you privilege and those that don’t. There are likely some that you have never had to think about before.”

• If you place identity signs on tables as tents:
  Say, “We are going to be doing an activity now that requires us to move around the room. I’m going to read a statement and then you’re going to answer that statement by placing yourself by one of the signs that are on the tables. The statements relate to your experience of these identities. We’ll then have a chance to talk in small groups and reflect as a large group. This activity is a way to explore the parts of your identity that give you privilege and those that don’t. There are likely some that you have never had to think about before.”

2) State the ground rules for this activity:

• Be honest and willing to share. If you tend to be quiet in groups, challenge yourself to share.
• Resist the desire to interrupt.
• Be mindful of time.

3) Invite participants to stand up and prepare to move around the room. Let learners know that if anyone has any mobility concerns or needs to sit down when they get to a new place in the room, they are welcome to grab a seat nearby and do that.

4) Read the first statement and allow time for participants to move around to their different signs.

5) Invite learners to notice where others in the group are standing.

6) At this point, you have a choice between Option 1, which fosters more conversation, and Option 2, which moves more quickly:

   a. **Option 1:** Invite learners to connect in pairs or small groups with others who moved to the same identity sign and discuss what came up for them when they were thinking through the statement. After two to four minutes, ask if anyone would like to share the thought process behind their choice with the large group.

   b. **Option 2:** Invite learners to share the thought process behind their choice with the large group.

7) Read the next statement, repeating the process from Step 4.

8) After you’ve finished reading all the statements that you want the group to work through, invite learners back to their seats.

9) Using the provided questions, reflect on the activity as a large group.
**Statements**

1) The part of my identity that I am most aware of on a daily basis is ________________________________.

2) The part of my identity that I am the least aware of on a daily basis is ________________________________.

3) The part of my identity that I wish I knew more about is ________________________________.

4) The part of my identity that provides me the most privilege is ________________________________.

5) The part of my identity that I believe is the most misunderstood by others is ________________________________.

6) The part of my identity that I feel is difficult to discuss with others who identify differently is ________________________________.

7) The part of my identity that makes me feel discriminated against is ________________________________.

**Reflection Questions**

- How did it feel to do this activity?
- What did you find surprising?
- What do you want to explore further?

**Wrap-up**

To conclude this activity, it is helpful to summarize some of the major points that were brought up in the group discussion and to thank everyone for their honesty/vulnerability in what they were willing to name or share during the activity itself. Even if some people don’t share verbally, moving under/near the identity signs may bring up a lot of emotion or may take a lot of courage; therefore, it is good to highlight your appreciation of the group’s participation.

**Intersectionality Theory**

Individuals who do not consider themselves members of a minority group should not feel discouraged from taking the lead on providing implicit bias training, nor should individuals who are members of a minority group feel obligated to serve as facilitators. Individuals’ contributions to this shared learning experience must not be reduced to the value of a single identity (e.g., race, gender, orientation). Every person’s identity is comprised of multiple parts that intersect, are inseparable, and are shaped by the person’s interactions with others and with societal structures. This is a central premise of intersectionality theory, a framework that aims to identify how systems impact marginalized populations based on socially constructed categories, such as class, race, and gender.

In primary care, intersectionality theory can be applied in clinical and health service research to explore how patients’ multiple complex social positions impact their health. As one researcher notes, “Relational identifications are always overlapping, intersecting, and variant in ways that make it impossible to view each variable as separate ‘pure’ causalities...of receiving and accessing primary health care.” Health care professionals participating in implicit bias training should engage in activities aimed at understanding social categories and the ways in which people in these social categories relate to and interact with one another. This engagement will enable participants to transform their understanding of both the power dynamics that shape care delivery and the health inequities their patients experience.

**FACILITATOR TIP**

More information on intersectionality theory is available in The Promise of Intersectionality Theory in Primary Care by Zowie Davy [Qual Prim Care. 2011;19(5):279-281].
SECTION 4: Evidence of Implicit Bias

PLEASE NOTE:
This section corresponds with the “Science and Health Effects of Implicit Bias” PowerPoint presentation available online at www.aafp.org/implicit-bias.

The Neuroscience of Implicit Bias

An understanding of the neurobiological and cognitive psychology aspects of implicit bias provides a scientific context that is relevant to prior medical knowledge. This can reduce the tendency of health care professionals to underestimate the effects of implicit bias.

Medical research has revealed that implicit bias is found throughout the brain. There are useful aspects of implicit bias that pertain to instinctual behaviors of environmental adaptation and survival, such as being able to quickly assess and respond to dangerous stimuli. However, automatic responses to facial stimuli, combined with social conditioning, can result in bias against individuals, often based on race. Acknowledging that we all have biases is the first step toward reducing our reliance on generalizations or stereotypes.

Researchers believe that three regions of the brain relate to the activation of implicit bias (Figure 2).

Figure 2. Regions of the brain related to implicit bias activation

Frontal cortex: Associated with reasoning, first impressions, and empathy
Amygdala: Associated with automatic responses to stimuli and fear/“fight or flight” response
Temporal lobes: Store basic information about individuals and social stereotypes

FACILITATOR TIP
For more information on the neuroscience of implicit bias, read Chapter 2: Implicit Bias and Health Disparities in Just Medicine: A Cure for Racial Inequality in American Health Care by Dayna Bowen Matthew.
Implicit Bias and Patient Outcomes

Pointing out the relationship between implicit bias and patient outcomes is a key component of training because it will motivate learners to mitigate bias in the delivery of health care and medical education. Citing statistics on disparities, current research, and references to specific literature on the impact of implicit bias on clinical decision-making helps lay the groundwork for learners. A conceptual framework depicting how bias operates in the interaction between health care professionals and patients is provided in the corresponding PowerPoint presentation.

Implicit biases modify the relationship between health care professionals and patients by decreasing trust, self-efficacy, understanding, and satisfaction. This affects the patient’s ability to self-manage and adhere to treatment, and it limits the health care professional’s level of cultural proficiency, patient centeredness, and job satisfaction.

Studies examining the health outcomes of implicit bias have revealed significant effects. For example:

- Studies have found that when students enter medical school, they harbor implicit biases toward minority patients and their level of bias remains constant or increases over time. In a study by Hoffman et al. involving a sample group of white medical students and residents, half endorsed false beliefs about biological differences between black people and white people. As a result, they viewed black patients’ pain levels as lower than white patients’ pain levels and made less accurate treatment recommendations for black patients.
- A study of cardiologists by Daugherty et. al. found that implicit gender bias was associated with differences in simulated clinical decisions about cardiac testing for hypothetical male and female patients who had similar likelihoods of obstructive coronary artery disease.
- Studies by Kogan et al. and others have shown that the implicit biases of health care professionals toward women of color, particularly African-American women, are a contributing factor for racial/ethnic disparities in adverse maternal and child health outcomes and affect rates of racial/ethnic disparities in contraception use; access to and quality of prenatal care; and clinical decision-making in the intrapartum and postpartum periods.

Learners should be encouraged to conduct a systematic evaluation of patient outcomes in their practice/organization to identify disparities (e.g., by race/ethnicity, socioeconomic status, gender). If disparities exist, the practice or organization should develop an overarching quality or performance improvement strategy to reduce disparity gaps and achieve health equity.
SECTION 5: Strategies to Mitigate Implicit Bias in Clinical Practice

PLEASE NOTE: This section corresponds with the “Mitigating Implicit Bias in Clinical Practice” PowerPoint presentation available online at www.aafp.org/implicit-bias.

Increasing Self-Awareness

Mitigating implicit bias in clinical practice is a deliberate, ongoing process that requires self-awareness and self-regulation (Figure 3). It requires health care professionals to check in with themselves on a regular basis to ensure that they are acting based on a rational assessment of clinical situations rather than on stereotypes and prejudices.

Learner Activity: Denmark Kangaroo Orange

This exercise will help prepare learners to discuss the results of their Implicit Association Test.

1) Ask learners to record their responses to the series of prompts below. Allow enough time between prompts and at the end for learners to accurately calculate their responses.

2) Following the prompts, ask learners how many of them ended up with the phrase “Denmark Kangaroo Orange.” On average, about 70%-90% of participants will respond with this phrase.

3) If any learners ended up with a different phrase, ask them to share.

4) List some of the other possible word choices learners who ended up with “Denmark Kangaroo Orange” could have selected for each letter.

5) Ask learners what they think this exercise reveals about how our culture, beliefs, and/or experiences shape our responses and how this might cause us to generalize or perpetuate stereotypes, even if we know that these types of bias exist.

Key takeaways for learners from this activity include the following:

- Cultural norms, language, and experiences shape our individual knowledge and decision-making.
- Shared knowledge between “like” individuals and or groups (e.g., in clinical consults among health care professionals) may drive confirmation bias.

Prompts

1) Think of a number between 1 and 10.
2) Add 2.
3) Double the number.
4) Subtract your original number.
5) Add 8.
6) Subtract your original number.
7) Divide by 3.
8) Find the corresponding letter of the alphabet (1=A, 2=B, 3=C, etc.).
9) Think of a country that starts with that letter.
10) Think of an animal that starts with last letter of the country.
11) Think of a fruit that starts with the last letter of the animal.
**Learner Activity: Implicit Association Test Discussion**

This discussion of learners’ Implicit Association Test (IAT) results will reinforce the fact that implicit bias is pervasive. We all have these biases and removing all bias is impossible.

1. Share the results of your own IAT test.
2. Invite the group to share and discuss their results. Use the following questions to guide the discussion:
   a. Was anyone disturbed by their results? If so, please explain.
   b. How did your results make you feel? Please explain.
   c. Do your results make you feel differently about how you approach patient care? If so, how?

**Learner Activity: Social Perspective-Taking Surveys**

In the participant guide, two surveys are provided to help learners take the social perspective of others and recognize privilege in their personal lives, at work, and in the lives of others. Doing so will help them develop greater empathy and be more aware of implicit bias and its effect on patients.

The first survey is the Privilege and Responsibility Curricular Exercise (PRCE), which was designed for use by health care professionals (see *Appendix A*). The second survey should be used by medical students and residents; it focuses on how racial privilege influences the experience of a physician in training (see *Appendix B*).

1. Select the appropriate survey to use for your participants.
2. Direct learners to read each statement and select those that they feel describe their experience.
3. Ask them to count their total number of affirmative responses, write the number in the space below the survey, and stand when they are finished.
4. Once all learners are standing, ask them to sit down in order of their respective totals. Start by saying, “Please sit if your total is less than 5,” then move on to less than 10, and so on. Only individuals with the greatest privilege (i.e., the highest total) should still be standing at the end of the exercise.
5. Invite the group to reflect on the exercise using the following questions:
   a. What types of identities are reflected in these statements?
   b. What stood out to you?
   c. Were there any statements that you had never thought of before? If so, which ones?
   d. Were there any statements that you had thought about before? Please explain.
   e. Are there any statements you really wanted to select but couldn’t?
   f. Are there any statements you would add? If so, why?
   g. Why is this important to the work we do as health care professionals?

**Building Empathy**

Increasing empathy for others is essential to recognizing and managing implicit bias. Empathy brings patients and health care professionals together within the context of shared experiences, helping to protect patients against stereotyping and discrimination. It also shifts the position of power that health care professionals hold in the relationship so that providers and patients can share decision-making.
Video Activity: Building Empathy

Observing the impact of implicit bias on patients can help increase health care professionals’ empathy, particularly for marginalized patients.

1) Instruct learners to record their reactions as they watch a series of videos (available online at www.aafp.org/implicit-bias) in which patients share their diverse experiences with bias, discrimination, and racism during encounters with the health care system and health care professionals.

2) Following the videos, have them break into small groups to share their reactions and discuss whether learning about these patient experiences will influence how they will interact with patients in the future.

Video Activity: Observing Implicit Bias

Making a differential diagnosis requires health care professionals to gather information from a variety of sources, such as medical records, consultation with colleagues, and research from peer-reviewed medical literature. During this process, implicit biases begin to affect clinical decision-making, even before the clinical encounter with the patient begins.

1) Instruct learners to record instances of verbal and nonverbal indicators (e.g., statements, language, eye contact, facial expressions) of implicit bias while they watch two videos (available online at www.aafp.org/implicit-bias) that depict students discussing a case and two residents in consultation with their attending physician regarding a patient:
   a. “Inclusion in the Classroom”
   b. “Explicit Bias in Residency”

2) Following the videos, guide learners in a group discussion of their observations and their recommendations for alternative approaches to the situation shown.

Practicing Mindfulness

The nature of medical education and training can easily lead to a high level of cognitive overload and automatization. While both are often viewed as an expected effect of learning, indicating a mastery of the medical knowledge, they are often associated with negative outcomes for both individuals and society, such as stereotyping, prejudice, and bias. For clinicians, incorporating mindfulness techniques (e.g., mindful breathing or movement, body scan meditation) into daily practice promotes self-awareness and assessment, as well as regulation of emotions and behaviors. It helps them pay greater attention to their present experiences and consider whether bias is operating in their clinical decision-making.

Studies have shown that mindfulness practice can help address implicit bias by “reducing the likelihood that implicit biases will be activated in the mind, increasing [health care professionals’] awareness of and ability to control responses to implicit biases once activated, [and] increasing self-compassion and compassion toward patients.” These outcomes are consistent with functional and structural magnetic resonance imaging (MRI) studies showing changes in the core regions of the brain associated with self-regulation of awareness, attention, and emotion.

Mindfulness is “the practice of maintaining a nonjudgmental state of heightened or complete awareness of one’s thoughts, emotions, or experiences on a moment-to-moment basis.”

Mindfulness Training Centers and Resources

If you are selecting faculty to teach learners about mindfulness as part of the implicit bias training, look for individuals who have documentation that they are trained, qualified, or certified in teaching mindfulness-based programs (MBPs). According to the Midwest Alliance for Mindfulness, “[MBPs] are evidence-based mind-body programs that train participants in the cultivation of mindfulness in order to support well-being, address the causes of human distress, and offer pathways to relieving suffering. They are informed by theories and practices from contemplative traditions, science, medicine, psychology, and education.”

A list of mindfulness training centers and resources is available online at www.aafp.org/implicit-bias.
Activating Goals That Promote Fairness and Equality

The Family Physicians' Creed

I am a family physician
one of many across this country.

This is what I believe:
You, the patient
are my first professional responsibility
whether man, woman or child
ill or well
seeking care, healing or knowledge.

You and your family deserve
high quality, affordable health care
including treatment, prevention
and health promotion.

I support access to health care for all.

The specialty of family medicine
trains me to care for the whole person
physically and emotionally, throughout life
working with your medical history and family dynamics
coordinating your care with other physicians when necessary.

This is a promise to you.

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Like the creeds of other health care professions, The Family Physicians’ Creed reflects a commitment to egalitarian goals of equality, freedom, intelligence, respect for tradition, and humility. Associating these goals with minority groups is one way of controlling implicit biases and stereotypes. When activated, these goals undermine and counteract stereotypes before they are unconsciously or consciously recalled.

Learner Activity: Goal Activation

The objective of this activity is to demonstrate how health care professionals can activate goals that promote fairness and equality and associate them with tasks they perform daily when interacting with patients from minority groups (e.g., meeting and interviewing patients).

1) Have learners complete the short survey provided in the participant guide. On the survey, they will rate the importance of the four statements in Table 1 on a scale from Strongly Agree to Strongly Disagree.

2) Ask learners to select one goal from the survey (perhaps one they rated as Strongly Agree) and write a short description of a real-life personal experience involving an individual or group (e.g., an African-American male, a transgender woman, immigrants) in which they failed to live up to the ideals of that goal.

3) Ask learners to imagine a fictitious experience with the same individual or group from their first description that would affirm the goal they selected. Instruct them to write a description of the imagined positive experience.

4) Invite learners to share their descriptions in a group discussion, but do not require them to do so.
Table 1. Statements of professional values for health care professionals

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<td>1)</td>
<td>The health care professional’s main responsibility is to each individual patient rather than to society.</td>
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<tr>
<td>2)</td>
<td>It is the responsibility of society to provide everyone with the best available health care.</td>
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<td>3)</td>
<td>Society should allow patients who are willing to pay more to purchase more expensive treatments.</td>
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<tr>
<td>4)</td>
<td>It is unfair, in principle, for some people to have different health care than others for the same problems.</td>
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Collecting Counter-Stereotypical Information

Collecting information that is opposite of cultural stereotypes about the attitudes and behaviors of a group can help limit implicit biases. This information allows for the development of new associations that eventually become automatically activated when meeting a patient from the stereotyped group. One way for health care professionals to collect counter-stereotypical information is by engaging meaningfully with colleagues from stereotyped groups who exemplify attitudes and behaviors that defy the stereotype. Another way for health care professionals to collect counter-stereotypical information is by individualizing patients (e.g., by documenting unique stories or reminders in their patients’ charts). They should try to find shared experiences or common identities with patients and use that information to fill in knowledge gaps instead of making inferences and assumptions.

Learner Activity: Countering Stereotypical Information

This activity focuses on developing skills in countering stereotypical information. The two case studies below are presented in the participant guide. Each case involves a patient from a sexual or racial minority group who is struggling to manage a health condition.

1) Ask learners to review the case studies and identify at least one cultural stereotype about each patient that could create problems with diagnosis and treatment.

2) Instruct learners to generate questions to ask each patient that could reveal the degree to which the individual deviates from the cultural stereotype identified.

Case 1

Ismael is a 29-year-old male with history of HIV infection, depression, posttraumatic stress, and methamphetamine dependence. Today, he is presenting for a follow-up visit at an HIV specialty clinic where family medicine residents rotate in their second year. Three years ago, when Ismael was adherent to his regimen and daily Narcotics Anonymous (NA) meetings, his viral load was less than 40 copies/mL (undetectable) and his CD4 count was above 500 cells/μL (normal range). A month ago, a new resident asked Ismael, “When was the last time you used meth?” Ismael admitted he had used it the previous weekend.

Case 2

You are on an overnight when the emergency department attending calls you with an admission. He starts with, “Hey doc, sorry, but I’ve got a lame one for you. A 23-year-old African-American male came in claiming he’s in a ‘sickle cell crisis’ again, even though he was just here last week. I think he’s just drug seeking, but he’s tachycardic so I couldn’t discharge him. I gave him some naproxen but not any opiates. He looks disheveled like one of those gangster dudes and I think he’s just abusing them.”
SECTION 6: Case Studies

Case studies are often used as an instructional tool in implicit bias training because they provide an opportunity for learners to apply the skills they learn in training to real scenarios. The two cases presented in the participant guide describe situations in which implicit bias played a role in adverse health outcomes involving a mother and child.

1) Instruct learners to read the case studies and identify where and how implicit bias may have impacted the health outcomes for the patient described. Remind them of the common types of implicit bias (see Page 3).

2) Allow time for learners to discuss the case studies in small groups. Ask them to describe different approaches they could have used to change the outcome.

Additional cases are available online at www.aafp.org/implicit-bias.

Case 1: Ashley

Ashley is a 29-year-old G2P0010 woman with a history of a spontaneous pregnancy loss at six weeks gestation two years ago. She presents to the clinic today for a new OB visit at approximately eight weeks gestation. Ashley is a former high school and college softball player and is very active. She exercises five to six times per week for 60-90 minutes, with activities including CrossFit, cycling, and swimming. She has been vegan since college and benefited from her Division I school's nutrition program, so she is very well-versed in her body's nutritional needs. Ashley eats a wide range of fruits and vegetables, whole grains, and plant-based protein. She takes a prenatal vitamin with iron and also takes supplemental B12, “just to be sure.”

First OB Visit

At the beginning of the visit, Ashley’s weight and height are measured. She is 180 lbs. and her height is 5’5”, which puts her body mass index (BMI) at 30 kg/m². The nurse measures Ashley’s vital signs and comments, “I’m surprised your heart rate and your blood pressure are so normal, given your size.” Ashley is taken aback but decides not to say anything because she doesn’t want to make a scene. She hasn’t even met her physician yet.

The physician enters, congratulates Ashley on her pregnancy, takes a medical and obstetric history, and performs the exam. The physician then starts to talk about Ashley's current weight and BMI, as well as her expected and target weight gain. The physician goes into extensive detail about the importance of regular exercise and ways to cut back on junk food, soda, and calories so Ashley can stay within the guidelines. The physician also recommends that Ashley see a dietician to make sure she doesn't gain too much weight. Ashley declines the dietician referral and tells the physician about her vegan diet and her exercise schedule. The physician looks at her skeptically and says, “OK, we’ll see how things go, but I think you should see the dietician.” Ashley decides not to ask any more questions about her pregnancy or what to expect. She also doesn’t mention to the physician that her sister had blood clots during her pregnancy. She leaves the visit feeling unheard and unseen.

16-week OB Visit

At her 16-week visit, Ashley has gained 5 lbs., but she really feels good. She has continued to do CrossFit, but she is only going twice a week instead of three times and she is not doing any of the high-intensity exercises. In addition, she has reduced her weight-lifting load so that she can lift without holding her breath/doing Valsalva maneuver. She has continued to jog and swim and is doing these activities more often to balance the decrease in CrossFit activity. The first thing the physician mentions to Ashley is that she has gained too much weight. She is told she needs to eat less, exercise more, and stop drinking soda and eating junk food. Ashley is offered a referral to the dietician again. She declines, feeling demoralized.

20-week OB Visit

At her 20-week visit, Ashley is feeling more winded when she exercises. She used to be able to run six miles without stopping, but now she can barely make it a half mile. Although she was able to do the entire CrossFit set last week, she hasn’t been able to finish a full workout.
this week. She has some swelling in her left leg, and she has gained another 5 lbs. She mentions the shortness of breath, leg swelling, and decrease in exercise tolerance to her physician, who tells her that it’s likely because of the pregnancy and her weight gain. Ashley is advised to eat less salt and elevate her legs more. When she asks if salt would make just one leg swell, her physician smiles, pats her arm, and then leaves the room without answering her question.

**Outcomes**

That night, Ashley develops significant right-sided chest pain and shortness of breath. She calls an ambulance that takes her to the nearest emergency department (ED). She tells the ED physician that she has had worsening shortness of breath, difficulty with her usual exercise routine, and swelling in her left leg. The physician asks Ashley if she has any history of blood clots, and she replies that her sister had blood clots during a pregnancy earlier this year. The ED physician orders a computed tomography (CT) scan and blood tests. However, before any of the tests can be done, Ashley loses consciousness and goes into pulseless electrical activity (PEA) arrest. The ED staff performs resuscitation per advanced cardiac life support (ACLS) protocol but they are unable to obtain a pulse. After 50 minutes, a time of death is called.

**Explanation of Bias**

This case of maternal mortality illustrates biases that are very common in medicine:

- Weight bias (i.e., unreasonable, negative attitudes, beliefs, assumptions, and judgments about individuals who are overweight or obese)
- Attribution bias
- Anchoring bias
- Confirmation bias

The medical staff caring for Ashley had an attribution bias that her BMI of 30 meant that she was not exercising regularly or eating healthy foods. Therefore, they decided that her symptoms of shortness of breath and leg swelling must be related to her weight, weight gain (anchoring bias), and dietary indiscretion. Because Ashley felt disrespected and unheard, she didn’t tell her care team about an important historical detail—her sister’s pregnancy-related blood clots—that could have helped mitigate the staff’s confirmation bias that her dyspnea was related to her weight and being out of shape. This might have saved her life.

**Case 2: Tasha**

Tasha is a 22-year-old G2P0101 African-American woman at 24+4 weeks gestation who is brought in by ambulance to the Labor and Delivery (L&D) unit because of severe back and abdominal pain and reports of contractions. She arrives in L&D in significant pain. The primary nurse (Nurse #1) is quite attentive to Tasha and seems very concerned, but the second nurse (Nurse #2), who is more experienced, seems distracted and unconcerned when she meets the paramedics in the triage room. After the paramedics move Tasha onto the triage bed, Nurse #2 asks her, “What made you call the ambulance?” Tasha says that she doesn’t have a car and has been having severe pain in her lower abdomen/pelvis and back that comes and goes, like contractions.

**Intake by Nurses**

Nurse #1 puts Tasha on the monitor and places her hand on Tasha’s abdomen. Because she is less experienced, she is not sure if she is feeling contractions since Tasha is only 24+4 weeks. She turns to Nurse #2 for confirmation. Nurse #2 palpates for contractions for about a minute and tells Tasha, “I don’t feel any contractions, but we’ll watch you on the monitor for a while.”

Tasha tells both nurses that she thinks she might be having some discharge or leaking fluid. She says, “It started this morning, but there’s no bleeding.” Neither nurse does a cervical check. They ask Tasha about drug use, domestic violence, and whether or not she is with the father of the baby, and then they ask to collect a urine specimen. They obtain a verbal order for acetaminophen and hydroxyzine (Vistaril) from the laborist who is attending because the resident is finishing with a delivery.

**Resident Interview**

Twenty minutes later, the resident has finished the delivery and is informed by Nurse #2 that Tasha needs to be seen. Nurse #2 says, “She took an ambulance here because she thought she was having contractions, but she isn’t. No contractions on the monitor and I don’t feel any either. She’s having some discharge and probably has BV [bacterial vaginosis]. I don’t know why these people always have to take the ambulance here for stuff like this. She could have gone to the clinic.”
The resident is only on the second week of L&D and is inexperienced. During an extensive interview, Tasha tells the resident that her first birth, which was about a year ago, was at 36 weeks gestation. The resident asks Tasha if she has been on progesterone, but Tasha doesn’t know what that is. She doesn’t think her physician ever mentioned it to her. In Tasha’s prenatal record, the resident finds a note from her outpatient physician stating that Tasha did not have reliable transportation and hinting that black patients were almost never consistent about coming in for injections. The physician opted not to initiate progesterone.

Tasha continues to be in pain. However, per the nursing staff who saw her right after she came in, she appears more comfortable after the acetaminophen and hydroxyzine. She does not have any contractions on tocometry, although no one has palpated her abdomen since the initial assessment about 75 minutes earlier. Tasha tells the resident about her vaginal discharge and that she is possibly leaking fluid. She confirms that she does not use drugs or alcohol.

**Outcomes**

The resident leaves the room to have the nurse collect supplies to do a pelvic exam that includes an Amnisure, fetal fibronectin swab, wet prep, and gonorrhea/chlamydia. While the resident is on the phone calling an attending physician, a code blue is called to Tasha’s room. Nurse #1 is in the room when Tasha starts having significant abdominal pain and yells, “I need to push!” The resident, laborist, and many nurses run into Tasha’s room. They pull back her sheets to find that Tasha has delivered onto the bed an infant who appears to be 24-25 weeks and has minimal respiratory effort.

The resident clamps and cuts the umbilical cord and rushes the baby to the warmer just as the neonatal intensive care unit (NICU) staff arrives, including a neonatologist who happened to be in house. They start resuscitation immediately, including intubation and administration of surfactant.

Tasha’s infant girl, Lily, is able to be resuscitated and remains in the NICU with assisted ventilation and blood pressure support for the next five days. However, she suffers a grade IV intraventricular hemorrhage and bilateral pneumothoraces. On her sixth day of life, she has increasing oxygen needs and pressor support. Her mother opts to withdraw life-sustaining support, and Lily dies.

**Explanation of Bias**

This case of premature birth and neonatal death highlights a number of concerning biases regarding the patient’s race and socioeconomic status:

- Confirmation bias
- Anchoring bias
- Conformity bias

Because of Tasha’s **race and socioeconomic status**, her outpatient physician assumed that she would not comply with progesterone therapy to prevent preterm delivery. The physician did not provide Tasha with information about possible treatment options so that she could have a say in her care. Nurse #2 had a **confirmation bias** that she was not feeling contractions because she didn’t see contractions on the monitor. In addition, she didn’t believe that Tasha was having contractions because she had an **anchoring bias** that “these people” use ambulances in nonemergent situations. Nurse #1 was affected by **conformity bias**. Initially, she was concerned that Tasha might be in preterm labor, but she allowed Nurse #2’s opinions to influence her own assessment. The resident was also affected by **conformity bias**, delaying a pelvic exam based on the nurse’s assessment that Tasha’s case was less urgent because she was not in preterm labor. The resident and Nurse #1 were more susceptible to this type of bias due to their inexperience.
SECTION 7: Additional Reading

The following reading list is provided for individuals who wish to deepen their understanding of implicit bias, its effect on health outcomes, and training interventions.


References


APPENDIX A.

Social Perspective-Taking Survey
For Health Care Professionals

Directions: Read each of the statements below and select those that you feel describe your experience. Count your total number of affirmative responses and write it in the space below. When you are finished, please stand.

☐ If I should need to move, I can be pretty sure of renting or purchasing a home in an area that I can afford and in which I would want to live.

☐ If I ask to talk to the person in charge, I will be facing a person similar to me.

☐ If I walk towards a security checkpoint in the airport, I can feel that I will not be looked upon as suspect.

☐ If I walk into an emergency room, I can expect to be treated with dignity and respect.

☐ If I walk through a parking garage at night, I don’t have to feel vulnerable.

☐ I can easily buy posters, postcards, picture books, greeting cards, dolls, toys, and children’s magazines featuring people who look like me.

☐ I can easily trust that anyone I’m speaking to will understand the meaning of my words.

☐ I can feel confident that my patients feel that I am qualified upon first impression.

☐ When a patient asks where I’m from, I simply think that it’s because they’re being friendly.

☐ My employer gives days off for the holidays that are most important to me.

☐ I can come to work early or stay late whenever needed and know that my children will be cared for.

☐ I can speak in a roomful of hospital leaders and feel that I am heard.

☐ I can go home from most meetings feeling somewhat engaged, rather than isolated, out-of-place, or unheard.

☐ I can look at the cafeteria menu and expect to see that the special of the day reflects my culture’s traditional foods.

☐ My age adds to my credibility.

☐ My body stature is consistent with an image of success.

☐ I can bring my spouse or partner to an office gathering without thinking twice.

☐ I can be sure that if I need legal or medical help, my race will not work against me.

☐ I can take a job with an affirmative action employer without having coworkers on the job suspect that I got it because of race or gender.

☐ I feel confident that if I don’t understand something then it wasn’t written clearly enough for most others to understand.

☐ I can feel confident that if a family member requires hospital or emergency treatment, they would be treated with dignity and respect even if they don’t mention my connection with the hospital.

☐ I have no medical conditions or cultural/religious dietary restrictions that require special arrangements or that make others see me as different.

Total ___________

Adapted with permission from Holm AL, Rowe Gorosh M, Brady M, White-Perkins D. Recognizing privilege and bias: an interactive exercise to expand health care providers’ personal awareness. Acad Med. 2017;92(3):360-364.
APPENDIX B.
Social Perspective-Taking Survey
For Medical Students and Residents

Directions: Read each of the statements below and select those that you feel describe your experience. Count your total number of affirmative responses and write it in the space below. When you are finished, please stand.

☐ I have been taught since an early age that people of my own race can become doctors.
☐ Throughout my education, I could succeed academically without people questioning whether my accomplishments were attributable to affirmative action or my own abilities.
☐ During college and medical school, I never struggled to find professors and academic role models who shared my race.
☐ When I applied to medical school, I could choose from many elite institutions that were founded to train inexperienced doctors of my race by “practicing” medicine on urban and poor people of color.
☐ I am reminded daily that my medical knowledge is based on the discoveries made by people who looked like me without being reminded that some of the most painful discoveries were made through inhumane and nonconsensual experimentation on people of color.
☐ When I walk into an exam room with a person of color, patients invariably assume I am the doctor in charge, even if the person of color is my attending.
☐ If I respond to a call for medical assistance on an airplane, people will assume I am really a physician because of my race.
☐ Every American hospital I have ever entered contained portraits of department chairs and hospital presidents who are physicians of my race, reminding me of my race’s importance since the founding of these institutions.
☐ Even if I forget my identification badge, I can walk into the hospital and know that security guards will probably not stop me because of the color of my skin.
☐ When I travel to and from the hospital late at night as required by my job, I do not fear that I will be stopped, delayed, unjustly detained, inappropriately touched, injured, or killed by the police because of my race.
☐ I can attend most professional meetings confident that I will be surrounded by physicians who look like me, and that we will likely have mutual acquaintances who also share our race.
☐ I can speak my native language in my own dialect in professional settings without being viewed as uneducated or out-of-place.
☐ I know that I can leave the impoverished area where I work without being accused of abandoning my community.
☐ I can criticize medical institutions without being cast as a cultural outsider.
☐ I can name racism in my professional workspace and not be accused of being angry, potentially violent, or excessively emotional.
☐ When patients tell me they are “glad to have a white doctor,” I am not personally threatened, and I can choose to confront their racism or ignore it.
☐ I can pretend that health disparities don’t affect me or my family without acknowledging that we accrue benefits from a system that systematically favors our skin color.

Total ___________