

Words Matter: Strategies to Reduce Bias in Electronic Health Records

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TAKEAWAYS

- Biases and stigmatizing language in the electronic health record (EHR) can be reflected through negative physical or behavioral descriptors often related to race and ethnicity.
- Biased language in the EHR can negatively influence a patient's care across providers.
- This tool offers practical considerations for providers on how to write EHR notes that promote patient-centered care and dignity.

When health care providers — including doctors, nurses, and physician assistants — use biased and stigmatizing language in patients' [electronic health records](#) (EHRs), whether consciously or subconsciously, it can negatively influence the perceptions and actions of subsequent health care providers. This is an often-overlooked mechanism by which bias, including implicit racial and ethnic bias, can be passed from provider to provider and [contribute to health disparities](#).

Biased and stigmatizing language in EHR notes can change the attitude of providers toward adult patients as well as pediatric patients and their families. It can lead to lower quality or differences in treatment plans, including [less aggressive pain management](#). Patients can also feel [disrespected, marginalized, and distrustful](#) when they read biased EHR notes, and some can end up avoiding needed treatment.

These biases, frequently added to EHR notes as [negative physical or behavioral descriptors](#) as well as non-medically relevant stigmatizing details, are often based on patients' [race or ethnic identities](#). Providers can also be biased toward patients or patients' families with [substance use disorders, low health literacy](#), and other characteristics that can intersect with race and ethnicity. Biases can [perpetuate health care disparities](#), and the trust between patients and providers can be broken or never develop in the first place.



Training providers to recognize, replace, and avoid biased notes as well as verbal language can lead to more equitable and effective care delivery.

This tool outlines considerations for providers on how to write EHR notes that promote patient-centered care and dignity by: (1) trusting patients and avoiding communicating disbelief; (2) being mindful when using quotes; (3) focusing on positive themes and humanizing details; (4) learning to recognize and avoid stigmatizing language; and (5) educating providers and providers-in-training.

Strategies to Reduce Bias in EHR Notes

1. Trust Patients and Avoid Communicating Disbelief

Testimonial injustice in health care occurs when patients are deprived of their credibility based on identity prejudices. A recent study found distinct [types of problematic language](#) that communicated disbelief were more commonly found in EHRs of Black patients. Health care providers who disbelieve or dismiss Black patients often use biased language in their notes, including: (1) quotes that intimate a disbelief (“*The patient’s mother said that the ‘pills don’t work’ for her child*”); and (2) judgment or discrediting words that suggest doubt (“*He **claims** or **insists** that he is in pain;*” “*She **reportedly** had two seizures.*”).

Providers can strive for fair and just documentation to reduce racial and ethnic disparities in care delivery through these suggested EHR note-taking strategies:

- **Reflect and be thoughtful about personal assumptions** regarding which patients are believed and which patients are not believed;
- **Refrain from using discrediting or exaggerated words**, such as *claims, insists, or reportedly*; and
- **Be careful with the use of quotes** that could cast doubt on a patient’s narrative.

2. Be Mindful When Using Quotes

Providers are often taught to use quotes in EHR notes to bring in the voice of the patient, avoid incorrect interpretations, or protect themselves and their institution from legal action. Quotes can be useful in EHR notes to capture patient comments and provide contextual cues or clinical information (such as “*It feels like an elephant is sitting on my chest*”) or to capture the effects of illness on patients, including younger patients who cannot clearly articulate their symptoms (such as, “*Since I hit my head, it’s like I’m underwater all the time, and I can’t focus at school*”).

Providers unfortunately can also use direct [quotes in ways that perpetuate bias](#), imply skepticism, or show disrespect. Harmful quotes include ones that convey ridicule by highlighting stereotypical vernacular that can reference socioeconomic status or racial and ethnic identifiers, cast doubt on a patient’s comments, and focus on nonadherence without fully assessing why that is happening. The use of quotes differs based on a [patient’s race and gender](#), so being mindful about using quotes in EHR notes can prevent misinterpretations,

stigma, or bias. Some examples of [problematic quote types](#), along with their likely effects and possible alternatives without the need for quotes, are listed below (see Exhibit 1).

Exhibit 1. Examples of Stigmatizing or Bias Quotes and Alternative Language

LIKELY EFFECT	STIGMATIZING OR BIASED QUOTES	POSSIBLE ALTERNATIVES WITHOUT QUOTES
Stereotype	✗ His mother stated that the wound was supposed to be “all closed up” but that the lesion “busted open.”	✓ His mother shared that the wound was supposed to have healed but the lesion had ruptured.
	✗ Chief complaint - “I stay tired.”	✓ Her primary complaint is tiredness.
Disapprove or blame the patients	✗ Reports that if she were to fall, she would just “lay there” until someone found her.	✓ Reports that if she were to fall, she would not be able to get back up without assistance.
	✗ He does not believe that he has prostate cancer because his “bowels are working fine.”	✓ He is having difficulty accepting the diagnosis of prostate cancer because he expected bowel changes, which he has not had.
Undermine credibility	✗ Patient reports pain is “Still a 10.”	✓ Patient reports pain is still a 10.
	✗ The father said that that his daughter had a “reaction” to the medication.	✓ The father reports that his daughter had a reaction to the medication.

3. Focus on Positive Themes and Humanizing Details

Providers can use EHR notes to go beyond medical details and include a patient’s concerns, hopes, and goals, which can humanize patients and help subsequent providers see the patient as a person.

- **Compliment and show approval.** Providers can add compliments in EHR notes that spotlight the patient in a positive light or denote approvals, such as *“Ben has been good at remembering to use his inhaler at school at the first sign of symptoms to prevent a full-blown asthmatic episode.”*
- **Humanize patients and their families.** Providers can personalize EHR notes to help humanize patients, such as *“She enjoys walking her dog Scout with her mom,”* or to emphasize that people are more than their conditions through [“person-first” language](#), such as the *“patient with diabetes”* instead of the *“diabetic patient.”*
- **Build a sense of abundance.** Providers can focus on abundance by noting, for example *“This child is brilliant because…”* and identifying an asset list that is longer than a problem list. They can also document strength-based approaches or co-identified solutions with family members, such as *“Hakeem and his father have decided that joining a little league team would help Hakeem be more active.”*

- **Minimize blame, labeling, and judgment.** It is important to [minimize blame](#) on patients and avoid language that ascribes responsibility to patients for their conditions, opting for “*She is not tolerating oxygen*” instead of the judgmental, “*She is refusing to wear oxygen.*” Providers can also avoid judging situations that can happen to anyone or that might have valid explanations behind them. An EHR note that mentions “*She has not been checking her morning glucose for a month because she lost her blood glucose monitor*” informs the situation without any judgment statements.

Judgmental language in EHR notes can have negative impacts on patients. For example, [physicians who read a vignette](#) with the term “*substance abuser*” compared with the term “*having a substance use disorder*” were more likely to agree that a fictionalized patient was to blame, punitive measures should be taken against the patient, and/or that the patient was not in need of medical treatment.

4. Learn to Recognize and Avoid Stigmatizing Language

By comparing neutral versus stigmatizing language, providers can learn to recognize and avoid biases in their written and spoken words. Providers can use the side-by-side [chart note vignette](#) (see Exhibit 2, next page) alongside reflection questions to help identify stigmatizing language and find options to replace it with neutral language. Reflections could be done as an individual, informally with colleagues and staff, or as part of a more formal anti-bias training session across an institution. Reflection questions could include:

- What examples of stigmatizing language have you seen in EHR notes? What type of language could cast blame or reinforce stereotypes?
- When reading EHR notes from other providers, what judgments have you made, if any, and was it connected to language that reflected frustrations or negative judgments from the provider?
- What are opportunities to be more self-reflective with implicit or explicit biases and to encourage other providers to do the same? How would a patient feel to read EHR notes that you wrote?

Exhibit 2. Neutral Versus Stigmatizing Chart Note Vignettes

STIGMATIZING LANGUAGE	NEUTRAL LANGUAGE
<p>Mr. R is a 28-year-old ✗ sickle cell patient with chronic left hip osteomyelitis who comes to the ED ✗ stating he has 10/10 pain “all up in my arms and legs.”</p>	<p>Mr. R is a 28-year-old ✓ patient with sickle cell disease and chronic left hip osteomyelitis who comes to the ED ✓ with 10/10 pain in his arms and legs.</p>
<p>✗ He is narcotic dependent and in our ED frequently. At home ✗ he reportedly takes 100 mg OxyContin BID and oxycodone 5 mg for breakthrough pain.</p>	<p>✓ He has about 8–10 pain crises per year, for which he typically requires opioid pain medication in the ED. At home, ✓ he takes 100 mg OxyContin BID and oxycodone 5 mg for breakthrough pain.</p>
<p>Over the past few days, ✗ he says that he has taken 2 tabs every 4–6 hours. About 3 months ago, patient states that ✗ the housing authority moved him to a new neighborhood, and he now has to wheel himself in a manual wheelchair up 3 blocks from the bus stop.</p>	<p>Over the past few days, ✓ he has taken 2 tabs every 4–6 hours. About 3 months ago, ✓ he moved to a new apartment and now has to wheel himself in a manual wheelchair up 3 blocks from the bus stop.</p>
<p>Yesterday afternoon, ✗ he was hanging out with friends outside McDonald’s where he wheeled himself around more than usual and got dehydrated due to the heat. He believes that this, along with ✗ some “stressful situations,” precipitated his current crisis.</p>	<p>✓ He spent yesterday afternoon with friends and wheeled himself around more than usual, which caused dehydration due to the heat. He believes that this, along with ✓ recent stress, precipitated his current crisis.</p>
<p>The pain is aching in quality, severe (10/10), and has ✗ not been helped by any of the narcotic medications he says he has already taken. On physical exam, he appears to be in distress. He has no fever and his pulse ox is 96% on RA. The rest of the physical exam is normal although ✗ he reports tenderness to palpation on the left hip.</p>	<p>The pain is aching in quality, severe (10/10), and ✓ not alleviated by his home pain medication regimen. On physical exam, he is in obvious distress. He has no fever and his pulse ox is 96% on RA. The rest of the physical exam is normal other than ✓ tenderness to palpation on the left hip.</p>
<p><i>After 1 hour, the nurse documents:</i> Mr. R is sleeping but easily arousable and ✗ has been cussing at nurse. He refuses to wear his oxygen mask and is insisting that his pain is “still a 10.” His girlfriend is ✗ on the bed with shoes on and requests a bus token to go home.</p>	<p><i>After 1 hour, the nurse documents:</i> Mr. R is sleeping but easily arousable and ✓ seems distressed. He is not tolerating the oxygen mask and still has 10/10 pain. His girlfriend is ✓ by his side but will need to go home soon.</p>

5. Educate Providers and Providers-in-Training

As part of the initial and ongoing training of health care providers, including nurses and medical scribes who can also write EHR notes, education is needed to recognize, avoid, and address implicit bias in health care settings. This is the case in EHR notes as well as in interactions between patients and providers.

Medical schools, residency and fellowship programs, other training programs, and health care institutions can offer a variety of trainings, learnings, and reflective opportunities to reduce bias including:

- **Providing [anti-bias workshops](#)** to reduce stigmatizing language that include reflection exercises, interactive role-plays, practiced perspective-taking, and mindful language tools;
- **Sharing resources and tools**, including strategies to [promote equity and dignity](#) in clinical communications; American Medical Association's [Guide to Language, Narrative and Concepts](#); preferred language when [talking about addiction](#); and opportunities to [build trust with patients](#);
- **Fostering case-specific discussions or [person-first language simulations](#)** centered on word usage in medical school and as part of residency and fellowship programs;
- **Teaching in the moment** during clinical rotations; and
- **Asking for feedback and [insights from patients and their families](#)** on how they are treated and the impact of language used during treatment and in EHRs.



ABOUT THIS TOOL

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