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Tips to Combat Bias in Health Care for the Technologist

Recognizing various biases can improve health care treatment, accuracy of studies and build trust with patients.

Implicit and explicit bias have historically led to disparities in health and patient care, limited the diversity of the health care workforce, led to inequitable distribution of research funding and more.

Members of GovCIO Media & Research's **Health Tech Equity Working Group** joined together May 11 to outline some of the most pressing biases in health care and develop solutions to improve the way technology is developed, research is conducted, and patients are studied and treated.

TYPE OF BIAS	WHAT IS IT?	SOLUTION
Lamp Post Bias	A type of observational bias that occurs when people only search for something where it is easiest to look.	To mitigate the impact of lamp post bias, technology researchers and developers should search for answers not only in visible areas, but also study new grounds. They should also research a wider representation of the population, rather than use a minority to generate majority results. It's also important to put discoveries in proper context.
Anchor Bias	A cognitive bias where people rely too heavily on the first piece of data or information given on a topic.	Research suggests that while there is no way to eliminate bias, it is possible to develop strategies to help reduce its likelihood of occurring, such as limiting words that might introduce bias, reporting only factual information, being careful to separate professional decisions from personal feelings and developing cognitive walkthrough strategies for scenarios where bias is more likely to be present.
Over-reliance on Technology	The false perception that technology is fully objective, free of bias and able to outperform humans.	Improve the reliability of the technology and encourage clinicians to more accurately assess its reliability so that appropriate monitoring and verification strategies can be employed.
Statistical Bias	When a model or statistic is unrepresentative of the population.	Create surveys or collect data that give clearly defined requirements for your target audience and give all potential respondents an equal chance of participating, then enact proper oversight of the study to check for unconscious bias in the sample selection, process and data collection.
Average Bias	Health care providers assume patients with similarities should receive the same diagnosis.	Health care professionals should be aware of the additional needs of each patient and treat every patient as a unique individual.
Socio-economic Bias	An individual's socioeconomic status is based on their background and several factors including income, resources and employment.	Health care professionals need training to be aware of the challenges that marginalized groups face and increase contact with them.
Computer v. Patient	Doctors rely on automated and computer-driven interactions with patients. As technology decreases patient-doctor interactions, health care providers mind the computer before the patient.	Health care professionals should be active listeners and focus on the patient to provide the most accurate diagnosis.
Testing/ Data Bias	Relying too much on testing groups or data instead of listening to the patient.	Broaden testing groups to incorporate diverse populations.

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