

**Applied Clinical Informatics Call for Papers:  
Special Issue on Disparities, Biases, and Disinformation in Healthcare**

***The Ethical Role of the Informatician***

Disparities in health and healthcare exist in any specialty and care setting. Notable examples include racial, ethnic, geographic, socioeconomic, and other differences in diseases rates such as HIV, AIDS, hepatitis C, COVID-19, Type 2 diabetes, hypertension, certain cancers, infant mortality and life expectancy, and exposure to traumatic events. Disparities, biases, and moral failures are perpetuated in the design of and access to healthcare, and ultimately to the delivery of care which frequently is inequitable. At the heart of all of these disparities are data and information--their representation, content, semantics, and uses and their manifestation in diverse ways in electronic health records, patient-physician communication, decision-making, health messaging, and social and popular media.

As professionals who influence the information landscape, we have an obligation to identify and mitigate sources of bias in information systems and processes that perpetuate health disparities. Therefore, this special issue will provide a platform for the biomedical informatics community and others to contribute their research, opinions, case reports, or reviews of the literature to examine the ways informatics and information cause, perpetuate, or worsen health disparities and biases or contribute to attempts to identify, address, and diminish them. Authors will be able to explore how data can detect, identify, and highlight disparities and lead to their reduction.

One approach for authors for this special issue is to address the role of medical informatics in addressing injustices. The question before potential contributors is “What can and should we do as informaticians to use our skills, tools, expertise, and influence to detect and alleviate biases and disparities in healthcare?” All of these concerns are affected by healthcare information technology and systems that are within our purview.

Misinformation is ubiquitous in health from anti-vaccination campaigns to claims that the COVID 19 crisis is just a “scamdemic.” Informaticians have the skills and knowledge--and an ethical imperative--to investigate and implement corrective action to conscious or unconscious dissemination or consuming the tales and lore that so negatively affect health and well-being in our society. We can do this with information from local communities, from national studies, and from the medical institutions that serve the local areas and the nation. We can use our access to information to combat

misinformation and to provide positive messaging in anticipation of the disinformation that is bound to come.

## Topics and Scope

We invite contributions from the informatics, health communication, medical decision making, and public health communities that explore the problems of bias, disparities, and misinformation in health care, and how these disciplines could work together to solve them. Contributions may examine the ethical issues associated with biases and disparities in any healthcare domain. We also seek manuscripts addressing the global misinformation that so harms the many peoples of this world. This call invites contributions focused on both developed and developing countries; especially acknowledging the many developing nations' e-health and information management projects that have addressed ethics and disparities.

Potential topics for this special section include, but are not limited to:

- Biases in electronic health records
- Biases in algorithms, artificial intelligence and machine learning, including long-standing protocols and assumptions.
- Biases in patient-facing technology such as portals and applications
- Disparities and biases in self-reported data from patients or providers, including the interfaces that may distort input or alter the data in ways that discriminate.
- Representation of social determinants of health in electronic health records
- Disparities and biases in healthcare research
- Disparities in access to health-related information
- Strategies for reducing disparities
- Misinformation in social media on health related topics
- Government perpetuated misinformation (e.g., homosexuality, vaccination, COVID-19, etc)

## Paper Submission and Format Guidelines

Applied Clinical Informatics encourages a diverse range of submissions and demonstrations from academic and healthcare organizations, individuals, and industry that address any of the topics listed above.

Manuscripts may be submitted as Research Articles, State of the Art/Best Practice Papers, Case Reports, Reviews, or Letters to the Editor. All submissions should follow the Instructions for Authors at

[http://www.thieme.com/media/ita/ACI Instructions to Authors.pdf](http://www.thieme.com/media/ita/ACI_Instructions_to_Authors.pdf)

Authors are required to prefix the text "Special Section on Disparities, Biases, and Disinformation in Healthcare:" in front of their actual title - both in the submission site (<https://mc.manuscriptcentral.com/acij>) as well as the actual manuscript.

Special Topic Editors: John H. Holmes, PhD, Terry Hannan, MBBS, Ross Koppel, PhD

Questions about the Special Section on Disparities and Biases should be sent to John Homes (jholmes@pennmedicine.upenn.edu), Terry Hannan (drterryhannan@gmail.com), and Ross Koppel (rkoppel@sas.upenn.edu)

Submissions are due for the Special Section on August 1, 2021.