## 37th National Black Nurses Day on Capitol Hill Reimagining Health Equity: Addressing ongoing threats to America's well-being.

# Is AI the Answer to Global Health Equity?

The National Black Nurses Association (NBNA) serves as a national nursing body to influence legislation and policies that support comprehensive efforts to address health inequities for all Americans. Artificial intelligence (AI) and machine learning (ML) technologies in healthcare represent a significant leap forward in innovation and efficiency,<sup>1</sup> but can amplify systemic biases.<sup>2</sup> AI/ML algorithms and metrics must be evidence-based and free from systemic biases.<sup>2,3,4</sup> Nursing leaders are positioned to assist policymakers and data scientists in designing a standardized methodology for AI/ML to mitigate biases in predictive algorithms.<sup>5</sup> NBNA calls on the 119th Congress to support legislation to address systemic biases in rapidly developing and expanding AI/ML technologies.

### Background

- AI/ML technology used in healthcare (not evaluated by regulatory agencies) has been found to exacerbate health disparities.<sup>1</sup>
- **63%** of organizations intend to adopt AI globally within the next three years, contributing an estimated **\$15.7 trillion** to the global economy by 2023.<sup>2</sup>
- Federal guidelines are needed to oversee AI/ML use in healthcare technologies (in 2023, 25 states, including Puerto Rico and the District of Columbia, introduced AI/ML bills <sup>6</sup>).
- There is a need for peer-reviewed prospective evidence of AI/ML effects on patient care and the clinician experience, which pose several ethical and technical challenges.<sup>9, 10</sup>
- Existing biomedical datasets inadequately reflect the composition of the U.S. population.<sup>5</sup> (Closing these gaps will enhance data sharing and improve health equity for all <sup>5</sup>)
- Al promises to provide data-driven approaches to improve health outcomes, and nursing professionals must be positioned to use this technology effectively and ethnically.<sup>4</sup>

### Recommendations to Legislators

### NBNA calls upon the 119<sup>th</sup> Congress to support legislation such as:

- **S. 1564, the AI Leadership Training Act** ensures a training program for federal management officials and supervisors, educating them on the benefits and risks posed by AI.
- S. 293: Better Mental Health Care for Americans Act- includes using AI/ML or other clinical decision-making technologies.
- **S. 5152: AI Civil Rights Act-** landmark legislation requiring algorithmic decision-making tools for bias evaluation.
- H.R. 206: Health Technology Act of 2023- establishes that AI/ML technologies may be eligible to prescribe drugs if authorized by the state and FDA.

#### References

<sup>1</sup>Abràmoff, M. D., Tarver, M. E., Loyo-Berrios, N., Trujillo, S., Char, D., Obermeyer, Z., Eydelman, M. B., & Maisel, W. H. (2023). Considerations for addressing bias in artificial intelligence for health equity. *NPJ Digital Medicine*, 6(1). https://doi.org/10.1038/s41746-023-00913-9

<sup>2</sup>Garba-Sani, Z, Farinacci-Roberts, C., Essien, Anniedi, A., & Yracheta, J. M. (2024, April 25). A.C.C.E.S.S. Al: A new framework for advancing health equity in health care Al. (2024). *Health Affairs Forefront*.

https://www.healthaffairs.org/do/10.1377/forefront.20240424.369302

<sup>3</sup>Embi, P. J. (2021). Algorithmovigilance-Advancing methods to analyze and monitor artificial intelligence-Driven health care for effectiveness and equity. *JAMA Network Open, 4(4), e214622.* https://www.doi:10.1001/jamanetworkopen.2021.4622

<sup>4</sup>American Nurses Association. (2022). The ethical use of artificial intelligence in nursing practice. Position statement.

https://www.nursingworld.org/globalassets/practiceandpolicy/nursing-excellence/anaposition-statements/the-ethical-use-of-artificial-intelligence-in-nursing-practice\_bodapproved-12\_20\_22.pdf

<sup>5</sup>Arora, A., Alderman, J. E., Palmer, J., Ganapathi, S., Laws, E., McCradden, M. D., Oakden-Rayner, L., Pfohl, S. R., Ghassemi, M., McKay, F., Treanor, D., Rostamzadeh, N., Mateen, B., Gath, J., Adebajo, A. O., Kuku, S., Matin, R., Heller, K., Sapey, E., Sebire, N. J., Colw-Lewis, H., Calvert, M., Denniston, A., & Liu, X. (2023). The value of standards for health datasets in artificial intelligence-based applications. *Nat Med*, 29(11), 2929-2938. https://doi.org/10.1038/s41591-023-02608-w

<sup>6</sup>National Conference of State Legislation. (2024). Artificial intelligence 2023 legislation. https://www.ncsl.org/technology-and-communication/artificial-intelligence-2023-legislation

<sup>7</sup>Norori, N., Hu, Q., Aellen, F. M., Faraci, F. D., & Tzovara, A. (2021). Addressing bias in big data and AI for health care: A call for open science. *Patterns*. 8;2(10):100347. https://doi.org/10.1016/j.patter.2021.100347

<sup>8</sup>Pailaha A. D. (2023). The Impact and Issues of Artificial Intelligence in Nursing Science and Healthcare Settings. (2023). *SAGE Open Nursing*, *9*(*1-4*). https://pmc.ncbi.nlm.nih.gov/articles/PMC10492460/

<sup>9</sup>Varsha, P. S. (2023). How can we manage biases in artificial intelligence systems – A systematic literature review. *International Journal of Information Management Data Insights*, 3(1). https://doi.org/https://doi.org/10.1016/j.jjimei.2023.100165

<sup>10</sup>Tighe, P. (2024, March 27). In conversation with...Patrick Tighe about Artificial Intelligence. *Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services.* 

https://psnet.ahrq.gov/perspective/conversation-withpatrick-tighe-about-artificial-intelligence