



March 14, 2025

Kirk Dohne  
Acting Director  
Networking and Information Technology Research and Development (NITRD)  
National Coordination Office (NCO)  
National Science Foundation  
2415 Eisenhower Avenue  
Alexandria, VA 22314

Dear Mr. Dohne,

The American Academy of Nursing (Academy) is pleased to offer the following comments in response to the February 6, 2025, request for information on the development of an artificial intelligence (AI) action plan. As requested in the RFI, this document is approved for public dissemination. The document contains no business-proprietary or confidential information. Document contents may be reused by the government in developing the AI Action Plan and associated documents without attribution. With more than 3,200 Fellows, the Academy—an honorific society and policy organization—represents nursing’s most accomplished leaders in policy, research, administration, practice, and academia. Collectively with our Fellows and partners, the Academy aims to create solutions that matter, inspire change that propels transformation, and envision a healthier future. Through intentional actions, the Academy advances its vision of *Healthy Lives for All People*.

AI is no longer novel yet continues to evolve and is currently being utilized in a multitude of ways. This technology assists predicting outcomes, supporting health care professionals’ documentation burden through ambient charting, and recommending treatments for patients. The implications for the health care workforce and health care delivery are still emerging—creating a potential gateway to greater efficiencies and reduced burden on clinicians. While there are clear and relevant efficiencies created through AI, the Academy remains concerned that the technology could further exacerbate access to care, patient safety, and privacy.

#### **Attention to Ethical Issues**

The National Science Foundation (NSF) will need to consider the ethical issues associated with AI as it develops the AI Action Plan. Through different venues, the Academy has long advocated for all patients to have access to information, education, and secure privacy related to their health care.<sup>1</sup> As AI plays an increasingly important role in the provision of patient care, research, and education, it is imperative that patients and consumers are aware of the opportunities and limitations of AI in their own health care. We encourage the NSF to take this into consideration as it develops the AI Action Plan.

**Consideration of Patient, Clinician, and System Burden**

The Academy also recommends NSF consider patient, provider, and system burden as the AI Action Plan is developed. The Academy supports efforts to reduce regulatory and redundancy burdens on daily practice while balancing patient privacy protections. In order to achieve the goal of placing the patient at the center of care delivery, policies must equally support clinicians and systems. The expected learning curve for providers as well as patient communities will need to be considered, and we encourage NSF to seek public input from patients, nurses, and systems on how to promote the benefits of using AI while also reducing burdens of use. Nurses will be key to educating patients in this process.

The implications for the health care workforce and health care delivery are still emerging, creating a potential gateway to greater efficiencies and reduced burden on clinicians. AI has the potential to disrupt and transform health care. It can be a tool in population health management, clinical decision making, workforce flow, and documentation. However, AI and machine learning could further exacerbate access issues in individualized care, patient safety, and impact the wellness of clinicians. The voices of nurses who are experts in AI will be vital in managing the short-term and long-term benefits and risks of AI to the nation's health as legislation and federal regulations continue to emerge. Many of the Academy's Fellows are esteemed leaders in machine learning, digital health, and AI who can be a resource as NSF develops the AI Action Plan.

Additionally, while AI can reduce the burdens of administrative and documentation tasks by allowing nurses to focus on patient care, the critical thinking and clinical judgment of nurses cannot be replaced by AI<sup>2</sup> nor can it replace the human connection that is central to the nurse-patient relationship. As such, nurses may have concerns regarding AI replacing their roles as nurses as well as how this technology could threaten the quality of care and safety of patients.<sup>3</sup> AI cannot replace the interpersonal skills that nurses utilize when caring for patients.

**Data Accuracy, Validity, and Reliability**

AI and its impact on improving patient care, the nursing workforce, research, and the health care system are of significant interest to the Academy. At the same time, data limitations can also affect these same areas and potentially erode trust, create privacy breaches, open systems to abuse or misuse, and most concerning, harm patients. The quality of the data used for AI has a direct correlation on the magnitude and nature of the consequences should an AI tool fail. Individual data points need to be captured seamlessly, completely, accurately, consistently, and in a standardized format to improve the use of electronic health data for AI and AI algorithms. To this extent, the Academy supports continued efforts to federally support further work on data and health information technology standards. In order to capitalize on AI in the health care industry, it will be critical to continue development of these standards. Furthermore, use of comprehensive data sources, inter-professional clinical data, and patient reported outcomes is essential to the development of AI solutions.

**Emphasize and Invest in AI Research**

The Academy recommends that the AI Action Plan includes investment in research and post-market surveillance to monitor the impact of deployed AI. Innovation in the health care industry, as well as emerging practices around AI, must be tested and advanced for heightened impact and outcomes. Furthermore, we encourage further investments in the research being conducted at the National Institutes of Health to support the use of AI in health care.

The Academy appreciates the opportunity to provide comments in response to the request for information regarding the AI Action Plan. The Academy stands ready to work with you to provide expertise and shape AI policy solutions. If you have any questions or need additional information, please feel free to contact the Academy's Chief Policy Officer, Christine Murphy, at [cmurphy@aannet.org](mailto:cmurphy@aannet.org).

Sincerely,



Linda D. Scott, PhD, RN, NEA-BC, FADLN, FNAP, FAAN  
President, American Academy of Nursing

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<sup>1</sup> Starkweather, A. R., Coleman, B., Barcelona de Mendoza, V., Fu, M. R., Menzies, V., O'Keefe, M., & Williams, J. K. (2018). Strengthen federal regulation of laboratory-developed and direct-to-consumer genetic testing. *Nursing Outlook*, 66(1), 101–104. <https://doi.org/10.1016/j.outlook.2017.11.004>

<sup>2</sup> Yakusheva, O., Bouvier, M. J., & Hagopian, C. O. P. (2024). How Artificial Intelligence is altering the nursing workforce. *Nursing Outlook*, 73(1), 102300. <https://doi.org/10.1016/j.outlook.2024.102300>

<sup>3</sup> Simpson, R. L. (2024). How nurses can conquer their fear of AI. *American Nurse Journal*, 19(1), 68. <https://doi.org/10.51256/anj012468>