Artificial Intelligence Funding in Healthcare: Article Analysis

Artificial intelligence (AI) funding in healthcare has evolved in recent years yielding new ideas, concerns, and beliefs about its role in medicine. The ebb and flow of AI funding depend heavily on breakthroughs in machine learning coupled with the concern for whether there is a prominent need for artificial intelligence in the healthcare industry. Specifically, when artificial intelligence garners support or criticism from political leaders, funding tends to increase rapidly or screech to a halt.

Recently, Representative Will Hurd, Republican from Texas, chair of the House Oversight and Government Reform Subcommittee on IT, has encouraged and "put forth funding and policy recommendations for addressing AI's impact on the public and private sectors – including healthcare" (Hurd & Kelly, 2018). As artificial intelligence continues to make an impact in the healthcare realm, funding will steadily increase to support new programs and research to improve AI techniques. AI in healthcare has grown increasingly prevalent and useful "from newly-approved tools to detect diabetic retinopathy, to applications for new techniques for pop health and precision medicine" (2018).

Within the healthcare field, AI will likely impact the following areas in the coming years: workforce, privacy, data integrity, and cybersecurity. Workforce implications may include job loss in the healthcare sector. Many government agencies in the United States are attempting to "boost efforts to improve training and reskilling so workers to be more competitive in an AI-driven economy" (2018). Privacy concerns arise because AI algorithms depend on personal data and other confidential information. Additionally, data integrity determines the trustworthiness of insights gained from AI algorithms. Hurd and Kelly state that government agencies "should ensure the algorithms supporting these systems are accountable and inspectable" (2018). Skeptics continue to debate the algorithms' accountability and integrity, but AI supporters claim to be fully aware of the concerns and plan on devising ways to track and remediate them. Lastly, using AI for malicious attacks is a concern specifically for government agencies that hold highly-sensitive information such as personal, military, and national security data. The suggestion here is that the government should proactively research the ways that AI "could be used to harm individuals and society and prepare for how to mitigate these harms" (2018).

The growing need for AI funding and research in healthcare should not be understated as "AI has the potential to disrupt every sector of society in both anticipated and unanticipated ways" (2018). Additionally, Hurd and Kelly believe "it's critical that the federal government address the different challenges posed by AI, including its current and future applications" (2018). Without adequate funding and research, it will be impossible to uncover the potential opportunities that AI can offer and the possible obstacles that may challenge the healthcare industry.

Article: Hurd, W., & Kelly, R. (2018, September). *Rise of the machines - federation of American scientists.* Rise of the Machines. Retrieved from https://irp.fas.org/congress/2018_rpt/hogr-ai.pdf