Defense Health Agency (DHA) Clinical Communities Speaker Series

2024 OCT CCSS: Fostering Quality and Excellence in Military Specific Care

S03: Exploring the Ethical Considerations for Artificial Intelligence in Military Medicine

Resource List

The American Medical Association (AMA) has developed a framework for health care Artificial Intelligence (AI), building on AMA policy for augmented intelligence and the latest research. The article, Advancing Health Care AI through Ethics, Evidence, and Equity (2023), guides physicians and the broader health care community in the development and use of AI. The AMA suggests responsible use of AI in medicine entails commitment to designing and deploying AI systems that support meaningful oversight and monitoring of system performance and recognize clear expectations for accountability. Education and training efforts are also needed to increase the number and diversity of physicians with AI knowledge and expertise.

Artificial intelligence is innovating the way that the world operates, and this is no more evident than in the Military Health System (MHS). The Health.mil article, Artificial Intelligence Changing Way Military Health System Delivers Health Care (2024), details a panel discussion with leaders across the MHS discussing the uses and implications of AI. The panel highlighted how AI can transform health care delivery and how the system can educate future health workers. The office of the assistant secretary for health affairs identified five key priorities for promoting trustworthy AI and machine learning including: maintaining an AI and machine learning inventory; enacting guidance for responsible AI; providing guidance for a trustworthy generative AI; promoting and enabling a digital workforce; and promoting and coordinating with other Department of Defense and federal agencies.

The journal article, Artificial Intelligence in Military Medicine (2024), sheds light on two resilience initiatives spearheaded by the Chief Digital and Artificial Intelligence Office. These initiatives aim to enhance commanders' dashboards for predicting troop behaviors and develop models to forecast troop suicidality. Additionally, it outlines five key AI applications within military medicine, including clinical efficiency and routine decision-making support, triage and clinical care algorithms for large-scale combat operations, patient and resource movements in the medical common operating picture, health monitoring and biosurveillance, and medical product development. Even with its promising potential, AI brings forth inherent risks and limitations that require careful consideration and discussion. The article also advocates for a forward-thinking approach for the U.S. Military to effectively leverage AI in advancing military health and overall operational readiness.

The National Institutes of Health's (NIH's) Office of Data Science Strategy (ODSS) sought to build a multi-disciplinary community of stakeholders interested in the social implications of technology to collaboratively envision the integration of artificial intelligence (AI) and ethics in biomedicine to advance the NIH mission. The NIH webpage, Collaboratively Envisioning AI and Ethics in Biomedical Research (2022), identifies important areas of consideration and problem-solving strategies at the intersection of AI, machine learning (ML), biomedical and behavioral sciences, and ethics. By forging new collaborations among these cross-disciplinary groups, the NIH sought to identify the benefits, risks, and future directions in biomedical AI that align with the public interest and ensure equitable health benefits for all communities.

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