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## AI-Related Competencies Outlined for Health Professionals



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A recent report outlines AI-related clinical competencies for healthcare professionals in aim of establishing how they can best prepare themselves to work with artificial intelligence in a clinical setting.

Responding to the growing practical and ethical concerns around using AI tools, there has been a push to create and establish health AI guidelines. A team of researchers at Vanderbilt University Medical Center and IBM Watson Health aimed to highlight the issue from the clinician's side and highlight how healthcare stakeholders should take shared responsibility in ensuring ethical use of health AI.

Whilst undertaking a literature review, the team discovered numerous calls for a list of AI related competencies as a result of the complications that come with using such tools, the risk of using the tools improperly, and unintended results. However, there was very little mention of how clinicians were trained to use these tools.

To complete what is missing, researchers interviewed 15 subject matter experts across the U.S. on the use of AI based tools in health care. Based on their interviews, they expressed some positiveness and caution. Although the experts recognised the benefits of new technologies in supporting health, they also acknowledged issues of bias and fairness. It is imperative that health professionals develop baseline knowledge, skills and attitudes to be able to work efficiently and safely with these tools.

Ultimately, 6 AI related competencies for health care professionals were formulated from these interviews. The six competency domains are as follows: basic knowledge of what AI is and its health care applications; the social, economic and political systems which impact AI tools, and the social and ethical implications; AI-enhanced clinical encounters; evidence-based evaluation of AI tools; workflow analysis for AI-based tools; and practice-based learning and improvement regarding AI-based tools.

Although recommendations for AI-related topics have been incorporated into the curricula of health professionals, no list of competencies had been formulated prior to this. Therefore, this addresses that gap by specifying a list of competencies needed for the use of AI-based tools in clinical care.

Source: [Academic Medicine](#)

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