

Publication

A smarter perspective: Learning with and from AI-cases

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Artificial intelligence (AI) has only partially (or not at all) been integrated into medical education, leading to growing concerns regarding how to train healthcare practitioners to handle the changes brought about by the introduction of AI. Programming lessons and other technical information into healthcare curricula has been proposed as a solution to support healthcare personnel in using AI or other future technology. However, integrating these core elements of computer science knowledge might not meet the observed need that students will benefit from gaining practical experience with AI in the direct application area. Therefore, this paper proposes a dynamic approach to case-based learning that utilizes the scenarios where AI is currently used in clinical practice as examples. This approach will support students' understanding of technical aspects. Case-based learning with AI as an example provides additional benefits: (1) it allows doctors to compare their thought processes to the AI suggestions and critically reflect on the assumptions and biases of AI and clinical practice; (2) it incentivizes doctors to discuss and address ethical issues inherent to technology and those already existing in current clinical practice; (3) it serves as a foundation for fostering interdisciplinary collaboration via discussion of different views between technologists, multidisciplinary experts, and healthcare professionals. The proposed knowledge shift from AI as a technical focus to AI as an example for case-based learning aims to encourage a different perspective on educational needs. Technical education does not need to compete with other essential clinical skills as it could serve as a basis for supporting them, which leads to better medical education and practice, ultimately benefiting patients.

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