

Artificial Intelligence Tools in Radiology and Radiology Education



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Introduction

Artificial Intelligence (AI) is an ever-growing field of medicine where machine learning can be used in a plethora of ways such as in the education of residents. Radiology is particularly susceptible to these advancements due to its technological reliance.

Methods

According to standardised PRISM-SCR guidelines, a scoping review was conducted to identify studies exploring Artificial Intelligence use in Radiology Resident education. 14 relevant original studies were identified between 2010-2025.

Discussion

This review has highlighted the advantages of Artificial Intelligence in Radiology education (Fig 1).

However, limitations such as reliability of technology, integration into current workflows and resource constraints should be considered to ensure equitable and generalisable access to this technology (Fig 2).

Standardised frameworks are required to introduce and assess such technologies in the future in the literature.

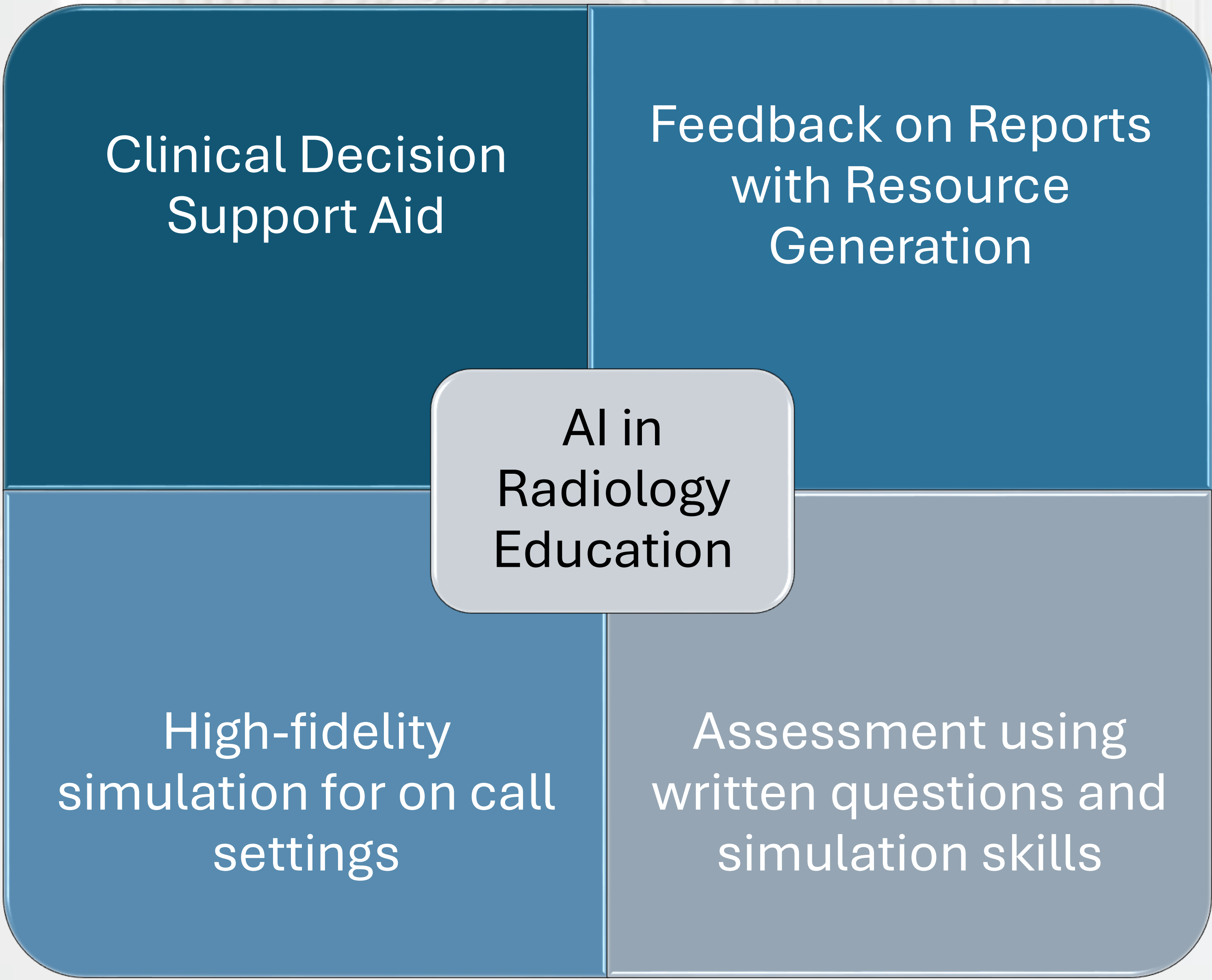


Fig 1 – Possible uses of AI in Radiology Education

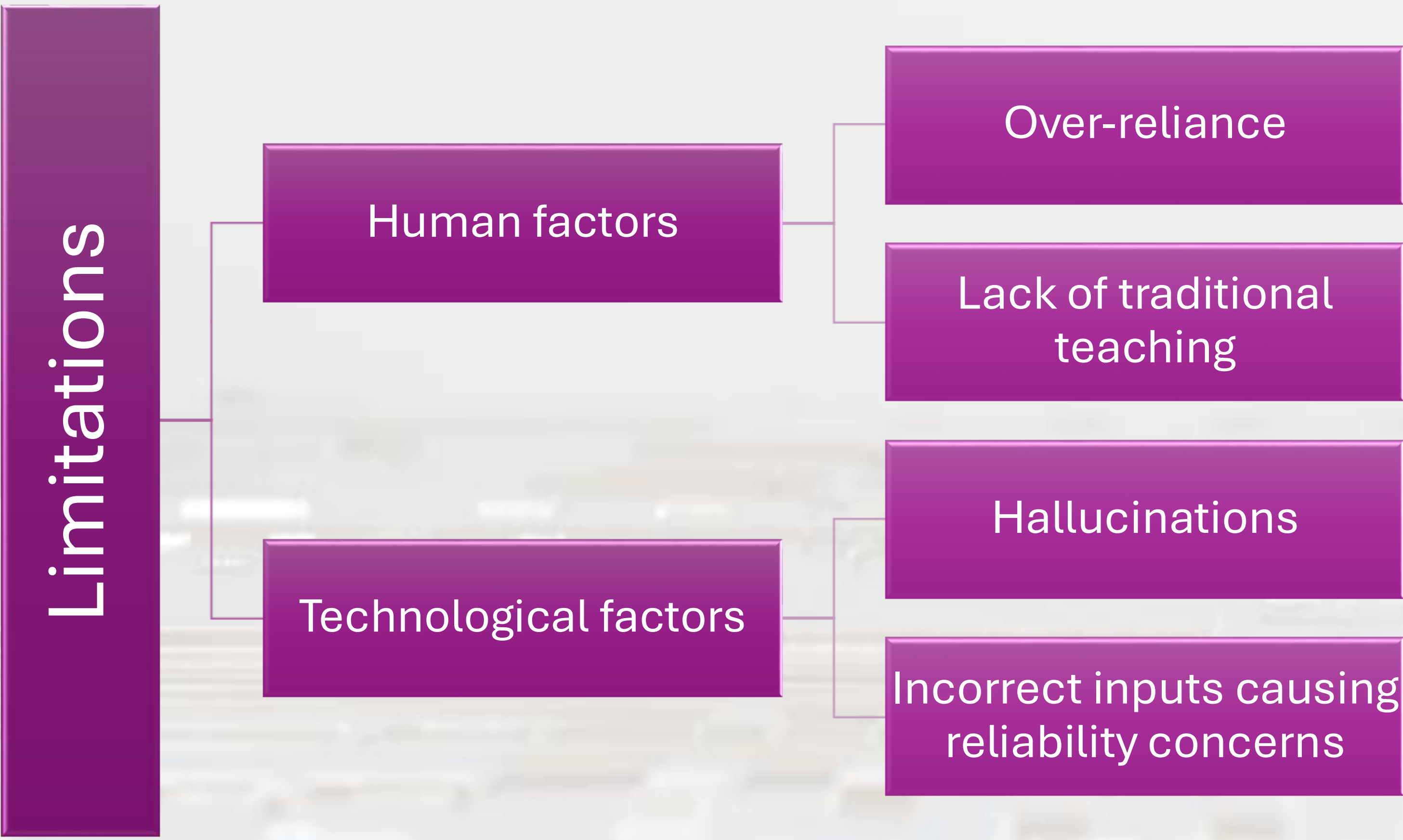


Fig 2 – Limitations of AI in Radiology Education