

## Al Innovation Scares Medical Students Away from Radiology



- Al negatively impact radiology as a career choice for US medical students.
- · Al discouraged one-sixth of students from selecting radiology as a top speciality choice.
- The medical community pass on negative opinions on Radiology Als to students.

Incorporating artificial intelligence (AI) into the radiology workflow is an active research area, where innovation focuses on providing decision support to increase radiologist efficiency and decrease workload burden. Although a boon to practising radiologists, incorporating AI into the radiological workflow also bears on medical students considering a future career in radiology. To determine how radiological Als might affect the recruitment for radiology residencies, an online survey was distributed to 463 medical students attending one of 32 US accredited medical schools (Reader & Lee 2022).

One-sixth of the students, who would have first chosen to specialize in radiology, did not because of AI concerns. Half of the 188 students who considered radiology within their top three career choices remained worried about AI. Avoidance of radiology as a career was associated with:

- 1. Lower perceived understanding of radiology
- 2. Fear of decreased job opportunities
- 3. Previous AI exposure through:
  - Medical students/family
  - Radiology attendings and residents

The authors summed up: 'Al is deterring US medical students from applying to radiology, fuelled by both individual concerns and exposure to Al from the medical community.'

These survey results complement earlier studies showing concern towards radiology and Al. The percentage of medical students with concern towards Al this study (53%) echoes other surveys in Canada (56%), United Kingdom (49%), and Germany (38%) Gong B. et al. 2019; Pinto Dos Santos D. et al. 2019; Sit C. et al. 2020). However, the degree of concern differed. For example, the Canadian study (Gong et al 2019) revealed that approximately one-third of medical students thought Al would fully replace radiologists, whereas 83% in the German survey felt the opposite (Sit C. et al. 2020).

To learn about AI use in their speciality choice, survey respondents preferred curricular integration over self-directed learning. Given that clinical radiology rotations are uncommon as a requirement in US medical schools, the study's authors felt that incorporating AI education into preclinical lectures may be a more effective way to teach AI. The survey respondents echoed these sentiments.

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