Expanded Scope of Practice Fellowships for Radiologists: A Survey of Interest Among Canadian Radiology Residents

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Introduction

- Medicine, medical imaging, as well as medical education and radiology residency training are constantly evolving
- The latest developments in artificial intelligence also pose some uncertainty for the future of Radiology
- Radiology residents' extensive training provides an opportunity to expand Radiology's scope of practice through fellowships involving direct work with patients in a clinical setting

Materials and Methods

- An electronic survey was distributed Canada-wide to the 13 English-speaking radiology residency programs
- Approximately 325 residents received the survey
- Survey inquired into factors including:
 - Interest in completing a clinical fellowship
 - Preferred type of clinical fellowship
 - Amount of time willing to dedicate to clinical practice

Choices of clinical fellowships

Anesthesia Benign diseases Chronic pain Clinician Scholar **Diabetes/Wound management Emergency Medicine** Incidentaloma management Low-risk Obstetrics Medical Oncology Palliative Care Public/Environmental Health **Renal Stone disease** Sports & Exercise Medicine Vascular/Atherosclerotic Medicine Other

Results

- Majority of respondents (69.2%) would be interested in seeing patients in clinic as part of their practice (15.4% would not and 15.4% were unsure)
- 54.2% indicated >50% interest in undergoing an additional year of clinical fellowship to enhance their skill set
- Residents would choose to dedicate a mean of 23.8% (+/- 14.8%) of their work hours to clinic (approximately 1-2 days a week)

Results

- The most popular choices for clinical fellowships were:
 - Sports medicine (22.8%)
 - Emergency medicine (19.6%)
 - Vascular medicine (18.5%)
- 52.9% of residents felt capable of offering incidentaloma clinics without additional training beyond their core radiology residency
- Of those interested in a clinical fellowship, 63.8% would opt to complete the training after a conventional diagnostic or interventional fellowship

Key survey comment responses

- "One could argue that clinical fellowships and increased patient contact are necessary for the survival of radiology as a profession, given the potential for automation in imaging interpretation."
- "I can potentially imagine a system where ER-Radiologist physicians are eventually able to sign off on x-ray and ultrasound reads that they interpret live while in the ER or urgent care clinic. This could help improve efficiency and potentially save money by implementing specific fee codes at a subsidized amount for those physicians with capability to bill for the patient encounter and image interpretation."
- "I don't understand[...] how this would not put us in direct competition with some of our referring physicians"
- "I'm not sure why radiologists want to pursue clinical fellowships after radiology given how weak most radiologists clinical skills are. Clinical medicine changes incredibly rapidly much like radiology and much like radiology takes years to build the clinical intuition and skills to safely practice."

Discussion

- Radiologists interpreting and signing off on imaging in a clinical setting can improve efficiency and reduce costs to the medical system
- Expanding the scope of practice can be important given the potential for automation in Radiology
- While an expanded clinical scope of practice may put radiologists into competition with other specialties, this will have overall net benefit for patients:
 - Improving clinical efficiency
 - Alleviating physician shortages
 - Allowing primary care providers to focus on pathology more within their comfortable scope of practice

Conclusion

- Almost 70% of surveyed radiology residents would be interested in seeing patients in clinic as part of their overall practice, approximately 1-2 days per week
- The most popular choices for radiology clinical fellowships were sports medicine, emergency medicine, and vascular medicine
- An expanded scope of practice can improve medical efficiency, address physician shortages, and help guard against changes due to automation



THANK YOU!