

Introduction

- Newly qualified doctors often struggle with providing necessary information to request appropriate imaging, which can lead to unsafe requests.
- We aimed to assess and enhance foundation doctors' knowledge and confidence in requesting imaging through an interactive teaching session.

Methodology

- 17 newly qualified FY1 doctors were surveyed and quizzed to evaluate baseline confidence and knowledge in requesting imaging.



- The quiz comprised questions surrounding common scenarios encountered as a foundation doctor where imaging may be requested. The validity of these questions were reviewed amongst a team of post-foundation year doctors and radiologists.

A nurse calls you at 2100hours about a 78-year-old female patient on the geriatrics ward with a new SpO2 of 87%. The patient has a history of congestive heart failure but not known to have COPD. She is given 3L of O2 via a NC, and the SpO2 is now 95%. What imaging should be requested next?

- CT chest with contrast, and contact radiologist for it to be done urgently
- CT pulmonary angiogram, and contact radiologist for it to be done urgently
- Portable CXR, and contact X-ray radiographer for it to be done urgently
- Request CXR and a porter to bring down to department urgently
- CT pulmonary angiogram, and contact radiologist for it to be done in hours

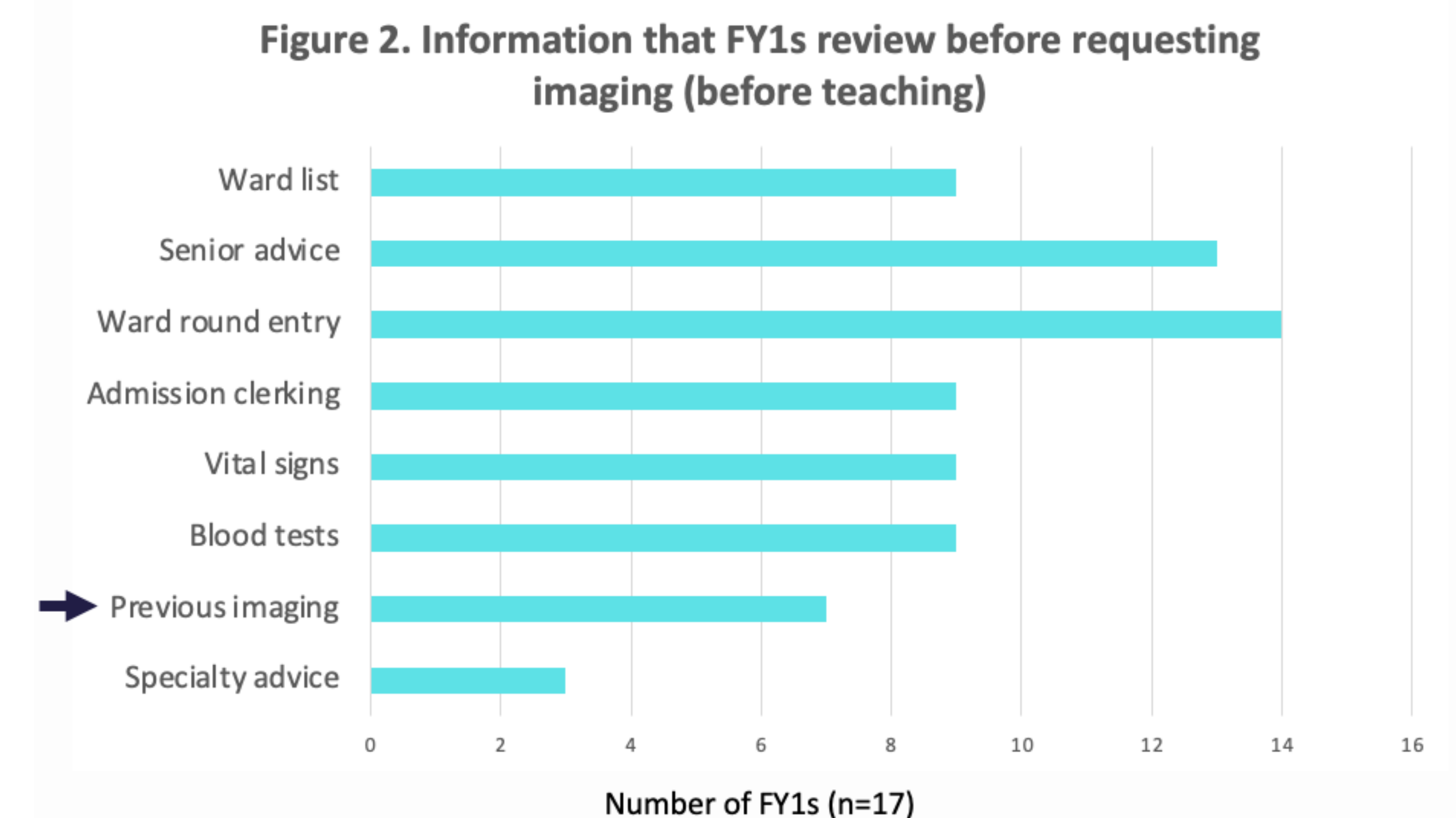
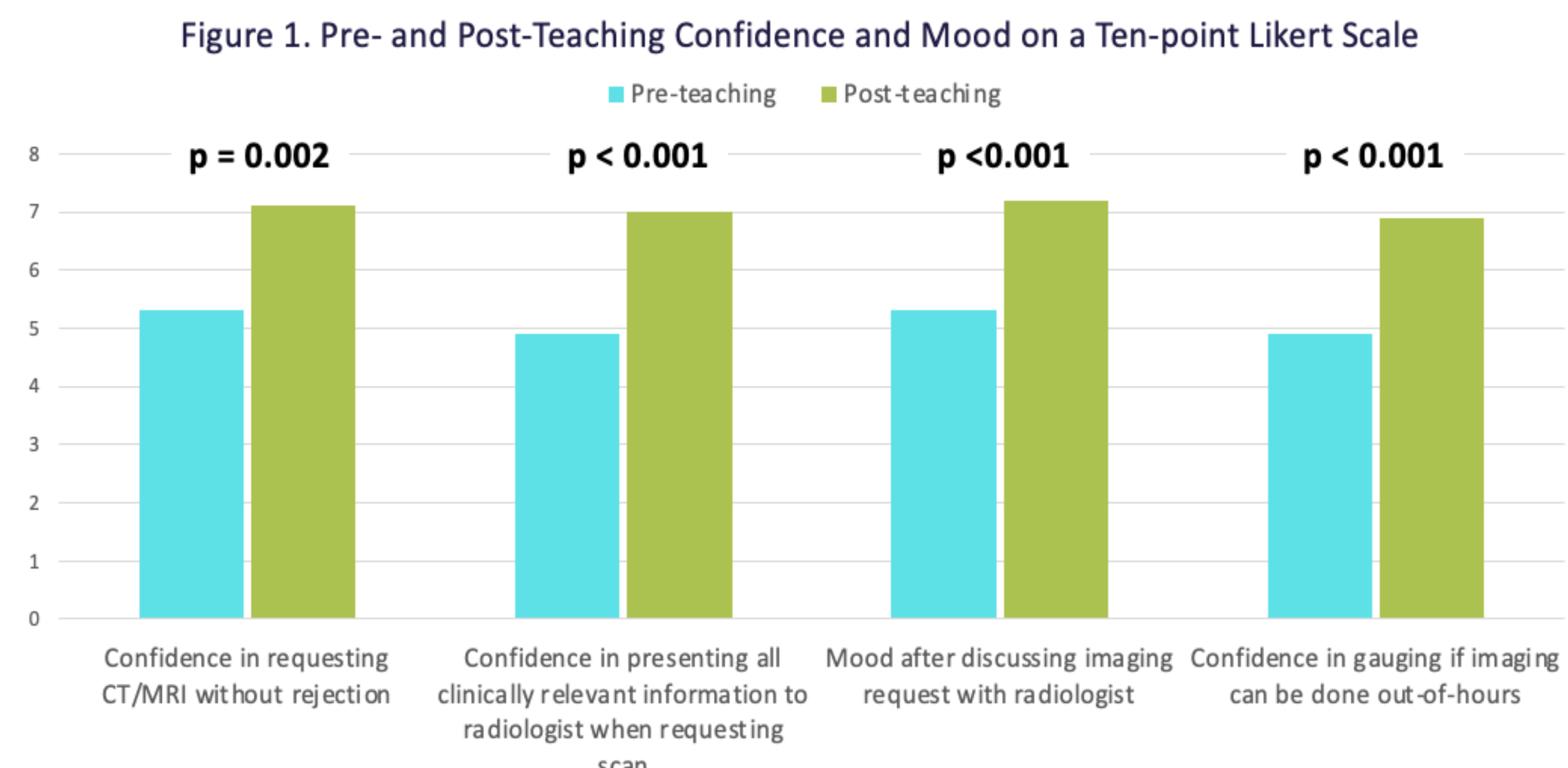
Example of question testing indication and consideration of safety for portable chest X-ray



QR code to access full questionnaire used.

- An interactive lecture focusing on how to communicate to radiologists and how to prioritise and decide urgency of imaging was conducted.
- Knowledge and confidence were then re-assessed after the seminar.

Results



- Confidence improved in requesting and prioritizing imaging after our teaching.
- Only a minority of doctors (41%) reviewed previous imaging, which many radiologists consider when deciding on further imaging.
- None of the doctors were fully aware of IRMER
- Knowledge (quiz) scores improved from 4.40 ± 2.07 to 5.60 ± 1.52 after the teaching session, albeit not statistically significant ($p = 0.359$) perhaps due to a small sample size.

Conclusion

- Many FY1 doctors were unaware of Ionising Radiation (Medical Exposure) Regulations and did not consider key types of clinical information pertinent to the radiologist.
- There was improved confidence regarding imaging requests demonstrated after small group teaching suggesting its utility. Such teaching should form a key component of induction for future FY1s in order to improve flow in their workload and safety in patient care.
- Implementing such teaching for final year medical students during assistantship placements will also be highly beneficial considering the limited exposure to radiology in the undergraduate curriculum.