

How would you promote Interventional Radiology as a specialty in the modern era?

There are two parties to whom Interventional Radiology(IR) should be endorsed; patients and those considering it as a career.

Modern medicine aims to achieve patient-centred care and shared decision-making(1,2). The Royal College of Radiologists(RCR) has identified that the primary responsibility of pre-procedural evaluations and discussions fall to the interventional radiologist(3), but the role of the interventional radiologist in a hospital environment is very much a doctor-to-doctor referral, with majority of patient interactions occurring in the radiology department(2). IR struggles with the fact that there are, to my knowledge, no dedicated IR wards and few IR clinics. Limiting both student and patient exposure. Recently, this has been acknowledged and there has been a drive for IR clinics and inpatient clinical support(3–5).

IR has rapidly germinated in the last half century, sprouting niches in almost all surgical specialities. It's uniquely positioned to adopt and grow alongside technology in scientific disciplines including computing, physics and pharmacology(6). New techniques in pre-procedural planning and image fusion are being brought into fruition, in an on-going endeavour to formulate minimally invasive, targeted procedures and to provide patients with superior options that carry a margin of the risk(6). Recent innovations include software used to predict ablation volumes, which when combined with CT scans, models the projected lesions, areas of insufficient ablation and heat sinks(6). The futuristic touch-less intra-operative display, originating from videogame console technology, allows an interventional radiologist who is scrubbed-in to command and manipulate images with hand movements alone(7). This technology could be a true game changer in the surgical field. Along a similar vein, endovascular navigation of guide wires, using magnetic fields heralds remote instrumentation(6). It has been attempted successfully in the mapping and ablation treatment for cardiac arrhythmias(8). IR has even been used to deliver peptide-targeted-alpha-radiation via vasculature in neuroendocrine tumours(9,10).

To thrive, this constantly innovating field should be showcased to undergraduate and junior medics(3,11). A recent study introduced IR lectures into the undergraduate curriculum, with improvements in interest among students(12). Theoretically, it can therefore be assumed increasing its exposure will increase IR recruitment. Introducing IR into the curriculum permanently is a lengthy process and radiology lends itself easily to multimedia and visual learning. The traditional lecture format is unlikely to do it justice. Fortunately, current students are of the technological era. Webinars, videos, apps, gamification and even virtual reality simulation can be utilised with likely increased engagement(13). Whatsapp particularly been shown to facilitate learning and organisation with medical students on clinical attachments(14). With increased networking and communication, IR doctors can reach students and junior doctors on rotation in the currently dominating specialities such as Cardiology, Neurology and Surgery. The platform can even be used to share interesting anonymised scans or short videos. This provides a modern-day, year-round, opportunistic teaching method, for the modern speciality.

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IR is a rapidly expanding, diverse discipline that will entice scientifically minded medics in all levels of their training. To mirror the innovations, their applications must be accessible to the patients who will greatly benefit from them.

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