

## Interventional Radiology—The Future: Evolution or Extinction?

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To the Editor,

During his inspiring Dotter Lecture at the last SIR 2016 in Vancouver, Dr Scott Trerotola emphasized on the need for Interventional Radiologists to compete [1]. Indeed, as a specialty, we probably spend too much time complaining about how other specialties want to take over our practice and how unfair that is. Competition is a fact in every sphere of life, and we need to embrace the reality of evolution and thrive through the provision of excellent, safe, and innovative patient care. The truth is that we have the skills, the knowledge, and the quality of interventional Radiologists to be dominant in this field. But do we have the confidence and the versatility to adapt to our changing environment? In our opinion, there are some fundamental issues that may impede our ambitions, and unfortunately, most of them have to do with the way IR has been built and structured over the years.

Diagnostic radiology has been an integral part of interventional radiology training, and certainly, the acquired skills during the diagnostic radiology training are invaluable. However, it has been realized that if we want to maintain [2] and establish our practice, we need to engage with and get ownership of the patients that we treat. We have already shown the benefits from establishing interventional radiology (IR) day units, but these are still not established in many centers [3, 4]. Considering the above and given the obvious time limitations, it would appear

difficult to maintain both a full IR and a full diagnostic practice. In a survey performed by the Canadian Interventional Radiology Association, most (73 %) respondents stated that interventional radiologists in Canada should become more clinical, whereas the most common reason cited for a lack of admitting privileges was a lack of time (44 %), followed by a lack of hospital or administrative support (40 %) [5]. In a world where sub-specialization seems to be a key, it feels like we are shooting ourselves in the foot by not focusing entirely on what makes us so unique. Progress is being made slowly, most evident in the USA with the introduction of a fully independent IR-focused training scheme as well as in Europe with the publication of the first dedicated IR training curriculum [6] and CIRSE guidelines with regard to standards for the provision of Interventional Radiological services [7]. The current heterogeneous training pathways (as it is in some European countries), the lack of clear and established clinical role, and turf battles are some of the reasons why IR may not always be able to recruit sufficient numbers of high-quality trainees [1]. The CIRSE European Trainee Forum is currently working on quantifying the extent of this problem in Europe, and it will soon provide data that will clarify the training conditions in the EU.

Established IRs need to show leadership, adapt, and modernize their practice fit for the twenty-first century. We need to move away from a future dominated by diagnostics to a clinical specialty focusing on using relevant diagnostics and imaging for treatments. In addition, modernizing the way we train the new generations of IR specialists in order to get them ready for a world of fierce competition is imperative in order to secure the future of our specialty. Obviously, more patient-oriented clinical training is needed as well as training on management, business, and

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leadership skills is needed. Setting up practices that are financially viable, based on innovative business models, is also a key requirement in order to compete and survive.

All the above would mean very little if we remain unknown to the public. According to a recent study by Andrews et al., only 6 % of patients scheduled to undergo an IR procedure at a community hospital had heard of the field of IR before their referral despite 21 % having undergone a procedure previously [8]. It is obvious that it is of paramount importance to improve IR recognition by promoting our work and our specialty at every opportunity. With the era of Internet and social media, there is an unlimited digital audience ready to hear about the kind of services we provide. We need to engage with the public, front line healthcare users, hospital administrators, and those commissioning healthcare to make them aware of IR and lobby for better provision of the excellent IR services we can provide. There are opportunities in campaigning or even fundraising for conditions that are directly within our treatment capabilities and is an opportunity to raise the profile of IR in a very positive way. IRs are not naturally pushy; in fact, on the whole, we are very conservative, but in order for our specialty to thrive, we have to unite and become more aggressive. Especially, we as the established IRs need to drive the changes on the ground to make the future happen. In 2011, only 5 % of all radiologists contributed to the Radiology Advocacy Alliance Political action committee of the American College of Radiologists [9], which is a committee aiming to increase the political power and voice of members of the Society. At the same time, cardiology and vascular surgical societies had two or three times greater engagement with obvious implications.

Competition is unavoidable and very often beneficial for the consumer/patient. Interventional radiology is at the brink of a major change from a subspecialty to an almost autonomous clinical specialty in the USA and soon elsewhere too. We need to learn from our mistakes and become proactive with regard to the challenges of the future. Focusing at what makes us so special, providing modernized training for our trainees, and, of course, promoting IR through our constant engagement with the public,

administrators, and politicians is vital to our future success. As Sir William Osler said, “By far the most dangerous foe we have to fight is apathy...not from a lack of knowledge, but from carelessness.”

#### Compliance with Ethical Standards

**Conflict of interest** Both authors have no conflict to declare.

**Ethical approval** Not applicable. This article does not contain any studies with human participants or animals performed by any of the authors.

**Informed consent** Not applicable.

#### References

1. Trerotola S., Competito R. Society of Interventional Radiology, Vancouver, Canada. 2016 April. [https://www.youtube.com/watch?v=\\_Io-RKkGyGM](https://www.youtube.com/watch?v=_Io-RKkGyGM). Accessed Apr 2016.
2. Al-Kutoubi A. Admission privileges and clinical responsibilities for interventional radiologists. *Cardiovasc Interv Radiol*. 2015;38:257–60.
3. Makris GC, Shaida N, Pyneandee R, Shaw A, See TC. Utilisation and outcomes following the introduction of an interventional radiology day unit. *Clin Radiol*. 2016;71:716.e1–6.
4. Allen Jr B. Radiologists adding value through the clinical practice of interventional radiology. *J Am Coll Radiol*. 2015;12(4):319–20.
5. Baerlocher MO, Asch MR, Hayeems E, Collingwood P. The clinical interventional radiologist: results of a national survey by the Canadian Interventional Radiology Association. *Can Assoc Radiol J*. 2006;57:218–23.
6. Bezzi M, Broutzos E, Hausegger K, Lee M, Nicholson A, Peregrin Jan, Reekers J. European curriculum and syllabus for interventional radiology. *Eur Curric Syllabus Interv Radiol*. CIRSE: ISBN: 978-3-9502501-3-8.
7. Tsetis D, Uberoi R, Fanelli F, Roberston I, Krokidis M, van Delden O, Radeleff B, Müller-Hülsbeck S, Szerbo-Trojanowska M, Lee M, Morgan R, Broutzos E, Belli AM. The Provision of Interventional Radiology Services in Europe: CIRSE Recommendations. *Cardiovasc Interv Radiol*. 2016;39:500–6.
8. Baerlocher MO, Asch MR, Puri G, Vellahottam A, Myers A, Andrews K. Awareness of interventional radiology among patients referred to the interventional radiology department: a survey of patients in a large Canadian community hospital. *J Vasc Interv Radiol*. 2007;18:633–7.
9. Shah RA. Radiology and political lobbying: the psychology holding us back. *J Am Coll Radiol*. 2013;10:77.