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EFRS, the Future of Radiography and Informatics

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Charlotte Beardmore, the Executive Director of Professional Policy for the Society and College of Radiographers, was appointed President of the European Federation of Radiographer Societies (EFRS) and is now serving as Immediate Past President. Charlotte has served on the EFRS board for a number of years. In an interview with HealthManagement.org, Charlotte discusses the future of radiography and describes EFRS’s strategy for meeting the changing needs of radiographers.



Key Points

- The EFRS works with multiple societies to raise the profile of the radiography profession, support radiographers in their practice, develop their education, and improve patient services. These collaborations can influence care policy at the European level.
- In the future, radiographers will continue to have a key role in the imaging practice, be the professionals who interact directly with patients in imaging, and integrate and collaborate more with care teams across the patients’ pathway of care.
- COVID-19 has forced the profession to become more flexible and collaborate more with wider health care professionals and teams to meet increased demand in a timely way.
- Demand for imaging services will continue to increase. Radiographers can adapt and transform the way they work, with excellent communication skills, significant scientific knowledge (understanding of imaging and AI technologies, biology, capturing and using data), whilst always ensuring that patient safety and personalised care remains at the heart of radiographic practice.

As the Immediate Past President of the European Federation of Radiographer Societies (EFRS), can you expand on how the EFRS can address the needs of radiographers?

The European Federation of Radiographer Societies’ role is as a Federation, members being National Societies of Radiographers, with affiliated educational institutions. The EFRS represents over 105,000 radiographers working in medical imaging, nuclear medicine, and radiotherapy – all key areas of practice for radiographers. It’s an umbrella organisation that supports radiographers. The Federation leads work over and above that of the individual member national societies. The EFRS also has an educational wing and works closely with educational institutions that provide radiography education across Europe.

The EFRS defines the entry-level degree requirements for

the radiography profession across Europe and has published a benchmark document at Level 6 (EFRS 2018), defining the skills competence and behaviours for the profession. The purpose of the document is to serve as a point of reference and benchmark for educational institutions, employers, and professional bodies. The benchmark documents also support the profession’s development to work at an advanced and doctoral level. The EFRS has developed a Level 7 Masters level benchmark document (EFRS 2017) and is working now on a Level 8 doctoral level document. Hence, supporting education standards for the radiography profession is a key part of the organisation’s work.

The organisation is also committed to developing guidance to help continue to grow and develop services for patients.



This is achieved through collaboration with others who work within clinical imaging, like the European Society of Medical Imaging Informatics (EuSoMII), the European Society of Radiology (ESR), and the European Federation of Organisations for Medical Physics (EFOMP). Collaborations with physicists,

and new technologies will require research together with the wider professional imaging team. The EFRS believes that the collaboration with EuSoMII will offer a fantastic opportunity for joint research into emerging technologies.

Education is a priority for the EFRS

radiologists, and oncologists are hugely important. EFRS also works closely with the International Society of Radiographers and Radiological Technologists (ISRRT), the international body for radiographers.

The EFRS also continues to promote the importance of evidence-based practice – supporting research is a key objective. The EFRS has recently established an expert research committee to lead and promote the research activity for the profession. The EFRS continues to support the excellent work of the EFRS research hub, which links with the ECR congress. The EFRS annual congress is within the annual ECR congress. There is a large scientific programme where radiographers worldwide share their research. It is pleasing to share that the congress programme continues to grow, supporting collaboration and sharing of best practices.

Can you elaborate on the partnership between EuSoMII and EFRS?

It's been a very positive partnership to set up. A memorandum of understanding was set up and promoted widely across the member organisations. Goals for improving the profession's education and training and providing Continuing Professional Development (CPD) opportunities to radiographers were also shared.

There are discussions on setting up an informatics committee for radiographers and running joint webinars. The EFRS has already launched a fantastic webinar series supporting CPD for radiographers. Therefore, collaborations on a series of webinars with EuSoMII would be very welcome. The EFRS also has a joint conference session at ECR in 2022 with EuSoMII, which we're looking forward to; this offers another excellent opportunity to promote our collaboration and talk and explore the informatics developments in imaging.

Education is a priority for the EFRS. Working with EuSoMII to develop education and training standards in informatics is an important goal and something we are keen to explore. The possibility of a European Diploma in informatics is exciting, so the EFRS looks forward to meeting to discuss this further.

As mentioned, radiography research is a priority. Radiology practice is developing, and the impact of artificial intelligence

Could you expand on how the EFRS can influence European policy decisions?

The EFRS has worked towards setting the European benchmark standards for the profession in Europe to allow the free movement of labour. Radiographers have key roles leading and contributing to the informatics requirements within imaging services. The development of an informatics diploma, recognised Europe-wide, would be an option to consider. The possibility of this supporting movement across Europe within informatics roles would be exciting. This could also support radiography career progression within the informatics field.

Imaging informatics is revolutionising radiography. What specific impact is it having on radiographers?

Informatics impacts all of our lives – how we work together, interface, and connect. For radiographers, in particular, the pace of change is increasing. It is important to understand how informatics can help offer a streamlined care package to the patient that is more personalised. As a profession, the EFRS is keen to support radiographers' development within informatics. Understanding the required skills will help support the development of education and training to support higher levels of practice within informatics.

Working with strategic partners will help identify areas for research across informatics. The EFRS is keen to ensure that patients are also engaged with all research areas within imaging services, so services are developed to respond to patients' needs.

How are the responsibilities of the radiographers changing?

Radiographers are the professional group who care for patients during their imaging examinations. Patients will ask radiographers about their examination, the safety, and the next steps in their pathway of care. Radiographers explain that to patients and reassure them.

Do you see their workflow changing at all?

Yes, the advancements in technologies, informatics and AI will drive change across services. Radiographers should be at the forefront of change, working as key professionals within the



imaging team, ensuring safety and implementing evidence-based standards within the imaging service for patients.

How has the COVID-19 pandemic affected the field?

COVID-19 has had a huge impact on everyone. Radiographers in imaging have been at the frontline throughout the pandemic. In many countries, the work of imaging services became mostly focused on chest imaging, so radiographers from other specialist areas were often called back to work within chest imaging. Equally, education providers had to respond and change their provision rapidly to support online learning. It was essential that the development of the pipeline of the future workforce continued despite the challenges of the pandemic. The use of simulation tools became ever more important.

During this pandemic, radiographers have learned to become

benefits that technology could bring for everybody. Imaging is core to nearly every single pathway in a hospital.

Streamlining care and improving services for patients is always a goal.

Is the EFRS playing a direct role in helping companies gather the right evidence they need to develop their products?

This is an important priority for the EFRS. As mentioned earlier, an EFRS expert research committee has been established to lead and support radiographer research. This committee is considering how best to build these stronger links with the industry. The committee also processes requests for research across Europe, so linking with industry is a priority in terms of influencing product development.

Radiographers in imaging have been at the frontline throughout the pandemic

more adaptable and flexible. Students have had to accelerate their training and complete it much more quickly to become part of the workforce and help manage the patient surge. The COVID-19 pandemic has made all of us look at things differently – to explore how teams work most effectively to share intelligence. It has forced us to rethink practice and how we can maximise the learning from the pandemic. I believe that all the imaging workforce (radiographers, radiologists, and physicists in imaging) have proven to be flexible and committed during these challenging times.

How can informatics help teams come together and collaborate better?

In many ways, the rapid use of online meetings has really helped. Technology is fantastic. It enables better collaboration and much more rapid sharing of information. But in imaging departments, much more can be done with modern informatics capabilities. How the imaging profession can influence the industry to research and work together with professionals to develop those technologies in a patient-centred manner is extremely important. Collaboration with industry is really important when talking about technology, artificial intelligence, and new equipment in services. Having that user input into that development is important too. Meeting industry partners to discuss the development of different equipment and technology is important. It is not efficient to work in silos. The key is to work together and encourage and demonstrate the

What new directions do you expect the field to take within the next five years?

The EFRS is soon to publish a document defining the future of the radiography profession, requirements for radiographic practice, radiographic education and radiographic research. Comprehensive research has been undertaken, through a Delphi methodology, with stakeholders. The purpose is to help ensure the profession is positioned to respond to the changing environment.

How is the imaging informatics field pushing personalised medicine forward?

Some of it's around the industry now. If patients had an imaging examination, could they automatically get the results without going back to the radiologist or back to the GP? Could they automatically access that information? Can they go to a centre where all of their imaging could be done at once very efficiently, rather than separately going for CT, MR, or chest x-ray? How is that collated together with other diagnostic information, like their genetic profile?

At the moment, the system takes various steps. Patients undergo imaging, genetic testing, blood tests, and heart monitoring. Are there any apps out there that can help them manage some of that and gather that information much more readily? And how does their genetic profile influence disease, etc.? Genetics will play a huge part in the future. How that



links with imaging examinations becomes integral. How packages of all the diagnostics come together is more important than working in diagnostics pathology. How can it all

Thinking about the future of education and how to develop programmes that best suit and respond to that requirement is important. Simulation certainly has a big potential.

Imaging is core to nearly every single pathway in a hospital

come together to deliver much more focused care for patients, enabling them to move on to their treatment or be discharged from the service because they're fit? There's a much greater role for how informatics can influence the monitoring of health-care. It's hard to predict exactly what the future holds, but it's key that informatics will play a critical part.

How do you expect that imaging informatics will affect the demand and employment of radiographers?

As imaging informatics is key to imaging services, support for postgraduate skills development will be important. A clear career pathway with underpinning education and training at advanced levels for informatics will be important and help support and retain the valuable radiographer resource within this clinical field.

What else do you think is important for the future of the radiographer profession?

Another area that is important for the future of the profession and the students within the service is how to best support them. Relating to the pandemic, some of them have had tough journeys, where they haven't been able to access the clinical placements. There is a huge opportunity to develop simulation to support student education and to think about how technological developments can help support learning. It is important to think about safely implementing simulation within the education and training of practitioners so that they can develop their skills rapidly in a different setting. Augmenting that with the clinical experience in the imaging department is essential.

One of the other areas of development will be around doctoral-level education and training for radiographers. This has also been discussed with EuSoMII and the importance of radiographers being lead researchers within their area of practice. This is important in supporting improved outcomes for patients.

The EFRS is developing an Education Qualifications Framework (EQF) Level 8. That's a new framework that will be developed over the coming year to support doctoral-level education and practice across Europe for radiographers.

How has participation at the 2021 EuSoMII Conference contributed to your goals?

It's great. The collaboration was set up last year. One of the goals in taking part in the annual meeting was to share the activities of the EFRS. There is a shared commitment to the development of informatics skills. EuSoMII is really keen to support the development of a diploma in informatics. The EFRS looks forward to meeting with EuSoMII to start to explore this. This would support higher levels of practice for radiographers working within informatics, and we look forward to this exciting opportunity and our collaboration with EuSoMII.

Conflict of Interest

None. ■

Watch the full interview [here](#).

REFERENCES

EFRS (2017) EFRS Benchmark Document for EQF Level 7 (Master Degree). Available from <https://www.efrs.eu/publications>

EFRS (2018) EFRS Benchmark Document for EQF Level 6 (Bachelor Degree) - 2nd Edition. Available from <https://www.efrs.eu/publications>