SA4 – The service implements and monitors systems to manage risks associated with the use of interventional radiology including the use of ablative technologies and therapeutic devices.

a) Risks associated with the use of interventional radiology including ablative technologies and therapeutic devices should be minimised for patients, staff and others. Good practice guidance suggests that policies and protocols should be developed, agreed, maintained and applied to all procedures using these devices. There should be a specific protocol for each procedure and piece of equipment used. Processes and protocols should be grounded in current best practice and reflect professional guidance and statutory requirements. Relevant staff should be aware of the protocols and how to access them, and any changes should be communicated to them.

b) All referrals should be vetted, prioritised, justified and authorised (see also standard statement CL1).

c) Details of implantable devices used in interventional radiology should be recorded on the report stored on radiology information systems (RIS) and in the patient care record or on a separate log to ensure that if problems are subsequently identified relating to a particular device or a particular batch, it will be possible to easily identify all relevant patients.

d) Legislation and guidance require the definition and assessment of risks and optimisation of procedures and equipment. Consideration must be paid to recognised best practice e.g. the use of the WHO checklist or stop and pause guidance. Risk assessment should cover possible direct damage to eyes or skin, possible harm arising from misdirected or malfunctioning equipment, risks associated with reflective surfaces, and the risk of fire, explosion or smoke inhalation. All equipment should be subject to regular quality assurance checks (see also standard statement FR3).

e) Where optical radiation is used, there should be a laser protection adviser, laser protection supervisor and a register of authorised users for each piece of equipment. Services should have specific policies for optical radiation safety, distinct from other radiation safety policies. All areas where optical radiation devices are used should be classified and monitored in accordance with national and local regulations. Access to these areas should be controlled (see also Standard FR1). Rooms should be equipped with protective equipment such as laser-proof blinds or barriers and eye protection should be available.

f) All staff involved with the use of interventional therapeutic devices and technologies, including those assisting in procedures, should receive appropriate training, including safety training (see also standard statement FR4). Records should be kept for each member of staff showing training completed with the date and nature of the training.

g) Evidence of regular morbidity and mortality meetings with other professional groups of staff as appropriate must be provided.

References

The Royal College of Radiologists. *Standards for providing a 24-hour interventional radiology service, second edition* BFCR (17)1 London: The Royal College of Radiologists, 2017 https://www.rcr.ac.uk/publication/standards-providing-24-hour-interventional-radiology-service-second-edition

The Royal College of Radiologists. *Investing in the interventional radiology workforce: the quality and efficiency case* BFCR (14)13 London: The Royal College of Radiologists, 2014

https://www.rcr.ac.uk/publication/investing-interventional-radiology-workforce-quality-and-efficiency-case

The Royal College of Radiologists. *Provision of interventional radiology services* BFCR (14)12 London: The Royal College of Radiologists, 2014
https://www.rcr.ac.uk/publication/provision-interventional-radiology-services

The Royal College of Radiologists. *Image-guided ablation*, 2nd *edition* BFCR (13)7 London: The Royal College of Radiologists, 2013.
https://www.rcr.ac.uk/image-guided-ablation-second-edition

The Royal College of Radiologists. *Standards for radiofrequency ablation (RFA), Second edition.* BFCR (13)8 London: The Royal College of Radiologists, 2013.
https://www.rcr.ac.uk/standards-radiofrequency-ablation-rfa-second-edition

The Royal College of Radiologists. *Improving paediatric interventional radiology services* BFCR (10)12 London: The Royal College of Radiologists, 2010
https://www.rcr.ac.uk/publication/improving-paediatric-interventional-radiology-services

Medicines and Healthcare Products Regulatory Agency. *Lasers, intense light source systems and LEDs – guidance for safe use in medical, surgical, dental and aesthetic practices).* London: MHRA, 2015.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/474136/Laser_guidance_Oct_2015.pdf

National Institute for Health and Care Excellence. *IPG413 Magnetic resonance image-guided transcutaneous focused ultrasound for uterine fibroids*. London: NICE, 2011.
http://guidance.nice.org.uk/IPG413

McWilliams, J.P. et al Image-Guided *Tumor Ablation: Emerging Technologies and Future Direction.* Semin Intervent Radiol, 2010, 27(3): 302-313.
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3324186/

National Institute for Health and Care Excellence. *IPG8 Radiofrequency ablation of varicose veins*. London: NICE, 2003.
http://guidance.nice.org.uk/IPG8

National Institute for Health and Care Excellence. *IPG30 Magnetic resonance (MR) image-guided percutaneous laser ablation of uterine fibroids*. London: NICE, 2003.
http://guidance.nice.org.uk/IPG30

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