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# Putting quality and safety for patients first: ESR EuroSafe Imaging



With the launch of EuroSafe Imaging at ECR 2014 as a flagship radiation protection initiative, the ESR created a new and comprehensive framework for its efforts to improve quality and safety in medical imaging in Europe.

The EuroSafe Imaging Steering Committee – chaired by ESR Past-President, Prof. Guy Frija, and composed of representatives from the ESR, EFOMP, EFRS, patient groups, industry and an observer from the European Commission – started implementing measures in 2014 to deliver EuroSafe Imaging's mission of supporting and strengthening medical radiation protection across Europe following a holistic, inclusive approach. A comprehensive strategy was developed and some significant progress achieved towards this end.

The EuroSafe Imaging Call for Action was launched in September 2014, designed to support the IAEA's and WHO's 2012 Bonn Call for Action, which identifies responsibilities and proposes priorities for stakeholders regarding radiation protection in medicine.

EuroSafe Imaging's 12-point action plan will make a significant contribution to each of the ten priority

areas in the Bonn Call for Action, and is also geared towards realising the campaign's own objectives of promoting appropriateness in radiological imaging, maintaining radiation doses within diagnostic reference levels, using the ALARA principle and promoting the use of up-to-date equipment, empowering patients, and joining forces with various stakeholders.

Progress was made in 2014 on several of these action items.

Conceived as an awareness campaign, communicating EuroSafe Imaging's efforts to improve quality and safety in medical imaging (Action 10) is essential. EuroSafe Imaging has published articles in journals and newsletters, issued press releases, and created a promotional video in 2014.

Implementation of Actions 1 and 9 started in November 2014, as an ESR expert group initiated the development process of European imaging

referral guidelines which will be adapted from criteria developed by the American College of Radiology (ACR). These guidelines will form the content for the ESRiGuide, a clinical decision support platform for distribution in Europe to be developed in cooperation with the ACR and the National Decision Support Company.

The development of the ESR's clinical audit tool was also driven forward in 2014, as the Generic Audit Guidance was published at the end of the year. The official launch of the tool itself is slated for ECR 2015.

In assuming the lead of a European Commission project on paediatric diagnostic reference levels (DRLs) entitled PiDRL, the ESR also contributed towards implementing measures to maintain radiation doses within DRLs (Action 3).

Education and training to improve radiation protection is of particular importance to the ESR, and the inclusion of 12 modules on radiation protection in its e-learning platform

'Education on Demand' as well as the EuroSafe Imaging radiation protection orientation session held at the MIR 2014 Annual Meeting in Bologna, Italy, in October 2014 were part of the implementation of Action 6 of EuroSafe Imaging's strategy.

With the launch of the cooperation with the research platform MELODI (Multidisciplinary European Low Dose Initiative) and the medical associations EANM, EFRS, ESTRO, and EFOMP in 2014, the ESR showed its commitment to Action 7 of the Call for Action. Implementation of Action 8 was also started, as the 'Is your Imaging EuroSafe?' survey series was launched in the November 2014 edition of *ESR News*. The aim of these surveys is to build a European repository based on DRLs for those clinical indications most helpful for self-benchmarking, thereby also contributing to Action 3.

Joining forces with a variety of stakeholders is an essential part of the structure of EuroSafe Imaging.

Not only does the campaign directly incorporate external stakeholders in the EuroSafe Imaging Steering Committee, the ESR also utilises EuroSafe Imaging as a framework to actively engage with decision makers at the national, European and international level to effectively represent radiologists' interests. This includes relations with EU institutions, the IAEA, WHO and HERCA, the association of regulatory authorities on radiation protection in Europe.

EuroSafe Imaging also aims to foster global cooperation on radiation protection by working with initiatives outside of Europe. The first meeting with the American campaigns Image Wisely and Image Gently was held in December 2014 to establish a basis for future collaboration.

The ESR also enhanced its cooperation with patients, as the ESR Patient Advisory Group, founded in 2013, developed a 'driver diagram of patient-centred care'. Other patient-related activities included the publication of an article on EuroSafe Imaging in the European Patients' Forum's newsletter and preparations to include more patient-centred information on the EuroSafe Imaging website.

[www.eurosafeimaging.org](http://www.eurosafeimaging.org)

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| <p><b>Action 1</b></p> <p>Develop a Clinical Decision Support system for imaging referral guidelines in Europe<br/><b>Implementing Bonn Call for Action 1:</b> Enhance the implementation of the principle of justification</p>  | <p><b>Action 2</b></p> <p>Develop and promote a clinical audit tool for imaging to increase the quality of patient care and improve justification<br/><b>Implementing Bonn Call for Action 1:</b> Enhance the implementation of the principle of justification</p>  | <p><b>Action 3</b></p> <p>Implement measures to maintain radiation doses within diagnostic reference levels (DRLs)<br/><b>Implementing Bonn Call for Action 2:</b> Enhance the implementation of the principle of optimisation of protection and safety</p>   |
| <p><b>Action 4</b></p> <p>Promote the use of up-to-date equipment and provide guidance on how to further reduce doses while maintaining image quality<br/><b>Implementing Bonn Call for Action 2:</b> Enhance the implementation of the principle of optimisation of protection and safety</p>             | <p><b>Action 5</b></p> <p>Establish a dialogue with industry regarding improvement of radiological equipment, the use of up-to-date equipment and the harmonisation of exposure indicators<br/><b>Implementing Bonn Call for Action 3:</b> Strengthen manufacturers' role in contributing to the overall safety regime</p>        | <p><b>Action 6</b></p> <p>Organise radiation protection training courses and develop e-learning material to promote a safety culture and raise awareness of radiation protection<br/><b>Implementing Bonn Call for Action 4:</b> Strengthen radiation protection education and training of health professionals</p>                 |
| <p><b>Action 7</b></p> <p>Collaborate with research platforms and other medical professions to develop a strategic research agenda for medical radiation protection<br/><b>Implementing Bonn Call for Action 5:</b> Shape and promote a strategic research agenda for radiation protection in medicine</p> | <p><b>Action 8</b></p> <p>Develop data collection project "Is your imaging EuroSafe?" and educational project on guidelines "Are you imaging appropriately?"<br/><b>Implementing Bonn Call for Action 6:</b> Increase availability of improved global information on medical exposures and occupational exposures in medicine</p> | <p><b>Action 9</b></p> <p>Develop criteria for imaging procedures that use ionising radiation in specific exams and anatomical regions<br/><b>Implementing Bonn Call for Action 7:</b> Improve prevention of medical radiation incidents and accidents and Action 8: Strengthen radiation safety culture in health care</p>         |
| <p><b>Action 10</b></p> <p>Improve communication with health professionals through EuroSafe Imaging Steering Committee, website, newsletters, conferences, training material and social media<br/><b>Implementing Bonn Call for Action 8:</b> Strengthen radiation safety culture in health care</p>       | <p><b>Action 11</b></p> <p>Improve information for and communication with patients regarding radiological procedures and related risks in order to ensure empowerment of patients<br/><b>Implementing Bonn Call for Action 9:</b> Foster an improved radiation benefit-risk-dialogue</p>  | <p><b>Action 12</b></p> <p>Engage with other stakeholders and collaboration with related initiatives and regulatory authorities in Europe and beyond to contribute to a global safety culture in medical imaging<br/><b>Implementing Bonn Call for Action 10:</b> Strengthen the implementation of safety requirements globally</p> |

The 12 points of the EuroSafe Imaging Call for Action are designed to support implementation of the Bonn Call for Action and the ESR's mission of improving quality and safety in medical imaging.