6. ESR Feedback on proposed self-commitments and on progress made

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Overview ESR self-commitments on CT optimisation

• The ESR’s voluntary self-commitment to activities related to CT dose optimisation are implemented through the relevant EuroSafe Imaging action items

• Presentation of update on ESR’s self-commitments submitted Sept 2016 corresponding to the following EuroSafe Imaging Actions:
  – Action 3: Implement measures to maintain radiation doses within diagnostic reference levels (DRLs)
  – Action 4: Promote the use of up-to-date equipment and provide guidance on how to further reduce doses while maintaining image quality
  – Action 7: Collaborate with research platforms and other medical professions to develop a strategic research agenda for medical radiation protection
  – Action 8: Develop data collection project “Is your imaging EuroSafe?” and educational project on guidelines “Are you imaging appropriately?”
  – Action 10: Improve communication with health professionals through EuroSafe Imaging Steering Committee, website, newsletters, conferences, training material and social media
Action 3: Implement measures to maintain radiation doses within diagnostic reference levels (DRLs)

Overview  ESR view:

• **Clinical DRLs, local DRLs and appropriate image quality** are the cornerstone of ESR’s policy

• Exposure protocols should be primarily based on clinical indications and not on anatomical region → important to establish DRLs for specific clinical indications

Update on ESR actions

– Dedicated EuroSafe Imaging working group on clinical DRLs
– EuroSafe Imaging Session on clinical DRLs at ECR 2017 (large audience!)
– ESR submitted Tender proposal to EC all for Tender „European study on clinical diagnostic reference levels for X-ray medical imaging.“ The proposed project aims to provide up-to-date clinical DRLs for the most important, from a radiation protection perspective, x-ray imaging tasks in Europe. In addition, it should stimulate national and local efforts in this area. (project under evaluation)
– Plan to initiate a follow-up project to PiDRL on paediatric dose data collection
Action 3: Implement measures to maintain radiation doses within diagnostic reference levels (DRLs) & Action 7: RP Research

Update on ESR actions (continued)

- **MEDIRAD project** on implications of medical low dose radiation exposure submitted to the Horizon 2020 EURATOM work programme awarded by EC (10 mio EUR, envisaged project start: June 1)
  
  • medical societies EANM, EFOMP, EFRS, ESR, and ESTRO have provided strategic guidance and input to the development of the proposal
  
  • G. Frija acts as Clinical Coordinator and E. Cardis, radiation epidemiologist and Head of Radiation Programme at ISGlobal, as Scientific Coordinator of the project;
  
  • Specific work package focused on optimisation of RP in medical imaging and nuclear medicine, by developing novel methodologies to monitor and reduce patient and staff IR dose and potential radiation-related risks while maintaining or improving diagnostic information with a focus on state-of-the-art CT, fluoroscopically-guided interventional procedures and hybrid imaging systems.
  
  • Detailed **image quality and dosimetric metrics** will be produced with the aim to develop an imaging and dose database prototype, to provide a structured approach for storage of, access to and processing of imaging and dose data for quality improvement and research use and paving the way for a harmonised approach in Europe
Action 3: Implement measures to maintain radiation doses within diagnostic reference levels (DRLs) & Action 4: Promote up to date equipment

Update on ESR actions

- EuroSafe Imaging Session on appropriate image quality at ECR 2017 (large audience!)
- Dedicated EuroSafe Imaging working group on appropriate image quality
- Outreach to industry planned for 2017 on interoperability issues (COCIR, contrast media companies, IT companies)
EURAMED – European Alliance for Medical Radiation Protection Research

- Aim: to coordinate medical RP research, identify common research areas, develop an aligned approach to European research calls
- Founding members: EANM, EFOMP, EFRS, ESR, ESTRO
- First common Strategic Research Agenda for radiation protection in medicine published in *Insights into Imaging*
- Optimisation identified as one of the key topics of research need
- EURAMED will participate in ICRP Symposium / European Radiation Protection Week, Paris, 10-12 Oct. 2017
- EURAMED considering setting up a consortium for 2nd CONCERT call

ESR contribution to the stakeholder meeting of European Radiation Dosimetry Group (EURADOS), June 2016
Action 8: Data collection

- Network of EuroSafe Imaging Star institutions increased over the last months (51 institutions awarded)
- All of the Stars participate in data collection surveys (focus CT)
Action 10: Improve communication with health professionals

Update on ESR actions

- **Ask EuroSafe Imaging working group** (multidisciplinary group made up by radiologists, radiographers, medical physicists)

- 5 Tip & Trick documents on CT optimisation developed and published with open access at http://www.eurosafefimaging.org/ask-eurosafefimaging/tips-tricks/ct

- Also integrated as modules in the ESR’s e-learning platform to increase visibility