



IAEA activities on justification of medical exposure

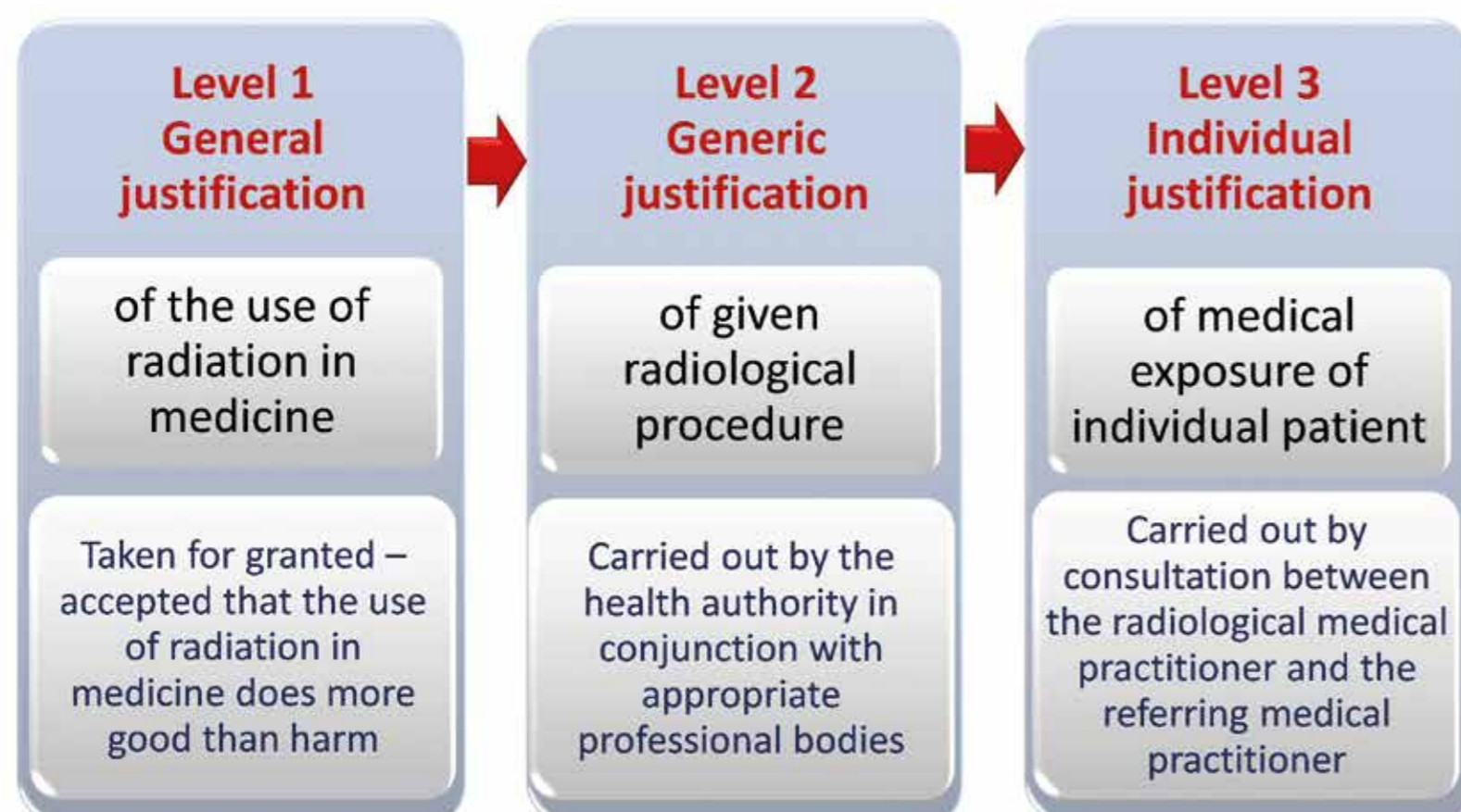
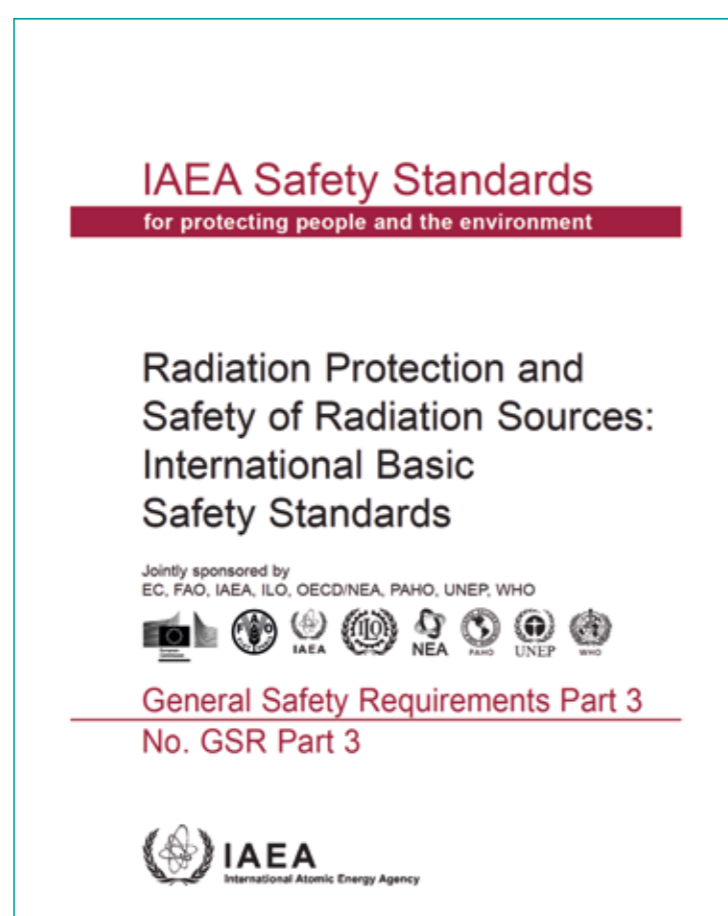
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Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards

Jointly sponsored by EC, FAO, IAEA, ILO, OECD/NEA, PAHO, UNEP, and WHO
IAEA Safety Series No. GSR Part 3, Published 2014 [1]

Requirement 37: Justification of medical exposures. Relevant parties shall ensure that medical exposures are justified.



International Conference on Radiation Protection in Medicine: Setting the Scene for the Next Decade, 3-7 December 2012, Bonn, Germany

Co-sponsored by the World Health Organization.

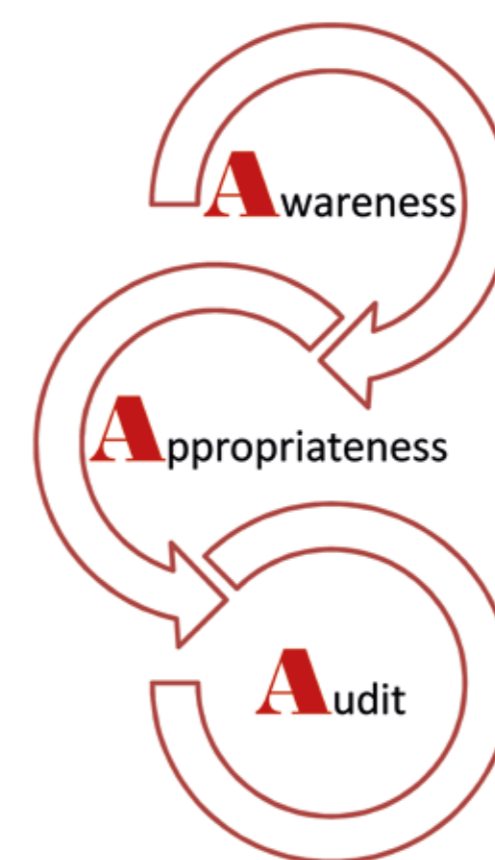
Attended by participants from 77 countries and 16 international organisations. An important outcome was the identification of responsibilities and a proposal for priorities for stakeholders regarding radiation protection in medicine for the next decade. This specific outcome is the Bonn Call-for-Action. It is a statement that identifies the main actions considered to be essential for the strengthening of radiation protection in medicine.

Bonn Call for Action



IAEA meetings on justification

- » 2007: Consultancy meeting on justification of patient exposure in medical imaging concluded: "There is a need for considerable further work, including research, on practical implementation and audit of justification in diagnostic imaging as well as in special situations involving screening and self-referral" [2]
- » 2008: Consultancy meeting reviewed practical and achievable actions that might lead to more effective justification, and summarised that justification would be facilitated by the "3 As": awareness, appropriateness and audit [3]



- » 2009: International Workshop on Justification of Medical Exposure in Diagnostic Imaging in cooperation with the European Commission, held in Brussels, 2-4 September 2009 addressed the following important topics: Referral guidelines; Communication and risk; Audit and justification; Special problems. [4]
- » 2010: Technical meeting on justification of medical imaging further discussed practical approaches
- » 2012: Technical meeting on radiation protection of patients through the development of appropriateness criteria in diagnostic imaging [5]
- » 2013: Technical meeting on justification of medical exposure and the use of appropriateness criteria

2014 Technical Meeting on Justification of Medical Exposure and the Use of Appropriateness Criteria, 11-13 March 2014, IAEA Headquarters in Vienna

Organised in cooperation with the World Health Organization.

Attended by 65 health professionals and regulators from 49 Member States and international organisations.

Objectives:

- » Review and decide on optimal processes for adapting existing clinical imaging guidelines – or appropriateness criteria – to national and regional clinical requirements as well as to the equipment that is available locally for diagnostic imaging;
- » Discuss how wider acceptance of the use of imaging guidelines among health professionals, authorities and patients might be achieved.

Summary and conclusions:

- » There are only a few professional organisations in medical radiology worldwide that have the capacity to develop and maintain clinical imaging guidelines (CIG).
- » The meeting focused specifically on the processes of adopting and adapting the existing CIG in the different diagnostic imaging environments around the world.
- » A limited subset of guidelines for the most frequent clinical situations faced in a country or region may be the best way forward if there are currently no guidelines in use.
- » Professionals prefer a range of different formats, from pdf files and booklets to apps and web-based applications.
- » The participants of the meeting recommended that international organisations should advise and facilitate the process of countries adopting and adapting CIG.



References

1. EC, FDA, IAEA, ILO, OECD/NEA, PAHO, UNEP, WHO. Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards, IAEA Safety Series No. GSR Part 3, IAEA, Vienna; 2014.
2. International Atomic Energy Agency (IAEA). Report of a consultation on justification of patient exposures in medical imaging. Radiat Prot Dosimetry. 2009 Jul;135(2):137-44.
3. Malone J, Guleria R, Craven C, Horton P, Järvinen H, Mayo J, O'reilly G, Picano E, Remedios D, Le Heron J, Rehani M, Holmberg O, Czarwinski R. Justification of diagnostic medical exposures: some practical issues. Report of an International Atomic Energy Agency Consultation. Br J Radiol. 2012 May;85(1013):523-38.
4. International Atomic Energy Agency. Justification of Medical Exposure in Diagnostic Imaging. Proceedings of an International Workshop. Brussels, 2-4 September 2009
5. Remedios D, Brink J, Holmberg O, Kawooya M, Mendelson R, Naidoo A, Reed M, Bettmann M, on Behalf of Members of the IAEA Technical Meetings on Radiation Protection of Patients Through the Development of Appropriateness Criteria in Diagnostic Imaging. Clinical Imaging Guidelines: A Proposal for Uniform Methodology. Journal of the American College of Radiology DOI: <http://dx.doi.org/10.1016/j.jacr.2014.07.023>