



## **Medical imaging specialists call for global referral guidelines**

Key representatives of the world's leading medical imaging societies have recommended that a common set of global referral guidelines for appropriate use of medical imaging be produced, in the first such global meeting of experts convened under WHO auspices in nearly two decades.

Experts from international, regional and national professional societies as well as the International Atomic Energy Agency and the European Commission, met in the WHO-hosted consultation in Geneva, 1-3 March, 2010. The consultation, "Referral Guidelines for Appropriate Use of Radiation Imaging", was held in the context of the WHO Global Initiative on Radiation Safety in Health Care Settings (Global Initiative), launched in December 2008.

Their call comes in the wake of trends that have seen diagnostic imaging and interventional radiology procedures being used more and more to accurately diagnose a wide range of illnesses and injuries and provide life-saving treatment.

At the same time, however, appropriate use of such technologies is becoming an important health policy concern, particularly since medical radiation exposure constitutes the main source of radiation exposures in many countries and inappropriate use can lead to unnecessary exposures.

The 36 experts, representing 23 agencies and professional societies from across WHO's six regions, agreed upon a roadmap to develop an international set of evidence-based referral guidelines and facilitate their implementation. Plans also call for monitoring the use and evaluation of the impact of the use of such guidance in different clinical settings.

The consultation recommended development of a global set of referral guidelines under the umbrella of WHO, and in collaboration with other relevant international bodies. This would include review, adaptation and expansion, as necessary, of evidence-based guidelines that exist nationally and regionally.

"Reduction of unnecessary radiation exposure by justification of radiological medical procedures is a major goal for the Global Initiative. Such a referral tool developed in collaboration with major expert agencies and institutions will contribute to that goal", says Dr Maria Neira, Director of WHO's Department of Public Health and Environment (PHE).

"This is a major collaboration towards a more coherent, global approach to promote an appropriate use of medical imaging and interventional radiology procedures. The guidance we envision will provide direction to practices in both developed and developing countries that may or may not have the most up-to-date technologies," says Dr Lawrence Lau, Chairman of the International Radiology Quality Network (IRQN), the leading international organization representing imaging specialists, imaging technologists and radiographers.

## **Background on Referral Guidelines for Medical Imaging**

Cancer is the biggest long term risk of significant and repeated exposures to ionizing radiation, especially in children and young adults.

National guidelines exist in many different parts of the world to promote good medical practice and protect patients from unnecessary exposures. Typically, these guidelines are the product of extensive and systematic literature review, in line with internationally-accepted practices.

Such guidelines generally provide recommendations for particular medical imaging procedures that should be used in diagnosis of different illnesses and injuries, along with: 1) the level of radiation dose for each type of procedure, 2) rating of efficacy of the procedure, and 3) grading of the strength of the evidence about efficacy of the diagnostic procedure.

Such guidelines provide critical reference points for doctor's referring or conducting medical imaging procedures. The guidelines also inform patients about the potential risks of ionizing radiation, so that they can make informed decisions about diagnostic procedures.

While most of the guidelines are available in developed countries, many fast emerging economies and developing regions are seeing a boom in demand for medical imaging procedures. These countries often lack a common set of national or regional guidelines for referral. And at the same time, developed country guidelines may not adequately refer to certain older technologies used in more poorly resourced settings.

The panel of specialists agreed on their proposed future collaboration under the umbrella of WHO and other international organizations for the development of common guidelines that would support countries not having such referral tools yet.

"This common set of guidelines to be produced over the coming two years would be unique in that they would take account of differences in available technologies and disease profile between and within countries," said Dr. Emilie van Deventer, Team Leader of the Radiation programme at WHO.

The societies and bodies represented at the meeting included the following:

Alliance for Radiation Safety in Paediatric Imaging- Image Gently Campaign, American College of Radiologists, Argentine Society of Radiology (SAR), African Society of Radiology (ASR), Association of General Practitioners (Geneva), Canadian Association of Radiologists, Chinese Society of Radiology, European Commission (EC), European Society of Radiology (ESR), Federal Office for Radiation Protection (BfS, Germany), Hong Kong College of Radiologists, Inter-American College of Radiologists, International Atomic Energy Agency (IAEA), International Pediatric Association (IPA), International Radiology Quality Network (IRQN), International Society of Radiology (ISR), International Society of Radiographers and Radiological Technologists (ISRRT), National Centre for Child Health and Development (Japan), Nuclear Safety Authority (ASN, France), Pan American Health Organization (PAHO), Royal and Australian New Zealand College of Radiologists, Royal College of Radiology (RCR, UK) and World health Organization.

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