

# The Royal Australian and New Zealand College of Radiologists



## STATEMENT

### Radiation and Appropriate Use of Radiology Tests and Procedures

***The Royal Australian and New Zealand College of Radiologists (RANZCR), the peak professional body for Radiology specialists in Australia, supports and promotes the appropriate use of diagnostic and interventional radiology tests and procedures.***

The radiation risk from x-ray procedures is not zero but it is, in most cases, extremely small and should be far outweighed by the benefits of the procedure. Every x-ray examination should be looked at in terms of its expected benefits. CT scanning is one of many useful investigations available to aid diagnosis, plan therapy and monitor the progress of significant diseases, with the radiation dose involved in a conventional diagnostic scan deemed to be justified by the health benefits that may arise from the diagnosis. Australian radiologists apply the ALARA<sup>1</sup> principle to their radiology examinations or treatments.

The RANZCR believes that radiology tests and procedures should be undertaken where clinically indicated, and where the risk versus benefit has been considered and, if necessary, explained to the individual patient. A multifaceted approach to moving towards the more appropriate use of radiology services is required involving the referrer, the consumer and the entire radiology industry; this must be based on best-practice, patient-focussed use of radiology. Radiologists are central to this approach: they have the expertise to provide advice on the most appropriate imaging procedures to reduce the burden of inappropriate imaging.

RANZCR has been concerned about the escalating demand for radiology services, and in particular the increase in referrals for CT examinations. The RANZCR's Quality Use of Diagnostic Imaging (QUDI) Program has been addressing these and other quality and safety issues. The QUDI Program has until recently been funded by the Australian Government Department of Health and Ageing (DoHA) and aims to support and promote the appropriate use of diagnostic and interventional diagnostic imaging. Significant achievements include:

- *InsideRadiology* ([www.insideradiology.com.au](http://www.insideradiology.com.au)) - provides a high quality web based resource with information (including risks and benefits) for consumers and health care providers.
- CT Dose Optimisation Quality Improvement Activities – to assist radiology practices to minimise the radiation dose during CT examinations
- Best practice standards for radiology referrals – to promote radiology referrals that include sufficient clinical information to allow the radiologist to determine the most

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<sup>1</sup> The international radiation protection community has, over many years, developed and applied the ALARA principle in developing guidelines that balance the benefits of radiation exposures against possible risks. This principle states that human exposures to radiation should be 'As Low As Reasonably Achievable, with economic and social considerations taken into account'

appropriate test (although under the current Medicare system, radiologists have limited scope to substitute tests).

- Radiology Events Register (RaER) collates and supports analysis of adverse events and near misses in radiology. The ultimate aim is to provide evidence to support improvements in radiology practice.
- QUDI and the National Institute of Clinical Studies have sponsored fellowships in evidence implementation, training radiologists in the art and science of supporting clinicians' use of evidence-based, appropriate diagnostic imaging.

Outcomes from these and other QUDI projects have been reflected in the RANZCR standards of practice.

The RANZCR has submitted a proposal to the Australian Government DoHA for continuation of funding for the QUDI Program.

In addition:

- *Diagnostic Imaging Pathways* a clinical decision support tool and educational resource (developed in Western Australia and endorsed by the RANZCR) provides a valuable resource for referrers and providers to assist in achieving the appropriate application of medical imaging technology to diagnosis.
- RANZCR for many years has been lobbying the Australian Government to extend Medicare rebate eligibility to all MRI machines in Australia. MRI involves no ionizing radiation and is the preferred modality for many investigations currently undertaken by CT.

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