

# Dosimetry Discussions

## The newsletter of the Australian Clinical Dosimetry Service Oversight Committee

Welcome to the 3rd newsletter from the Australian clinical dosimetry service Oversight Committee or AOC. Our aim is to provide you easy to read information on all things dosimetry auditing related. This issue features many sector related updates.

### New audits, new business model, now a new director

#### Dosimetry Developments

- New tomotherapy dosimetry audits to go to field trial
- A new director appointed to the ACDS

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One of the key positions within the ACDS is that of its director. As was reported in the first edition of the newsletter, Ivan Williams who was the inaugural director of the ACDS and nurtured it into the strong auditing service it had become by the end of the pilot, left the ACDS to take a promotion into corporate ARPANSA. Since then the ACDS has moved to a user-pays operating model and been undertaking a recruitment process to appoint a new director to lead the new look service. While it has been quite a protracted process Dosimetry Discussions is able to report that this has now been concluded and

the successful appointee is Jessica Lye.

Although the new director, as you may know Jessica is not actually new to the ACDS and is one of its inaugural staff members. However Jessica has been involved in dosimetry for longer than her 6 years at ACDS as she previously worked in the ARPANSA primary standards section. Prior to making her way to Yallambie Jessica was working in Florence, Italy doing research in quantum physics [*molto buono*].

Jess is a good indication that physicists do like all matter(s) to be ordered and so is also mum to a [nuclear] family with a son

Felix (6) and a daughter Sam (3). We're not sure how Jessica manages to juggle all those responsibilities but Dosimetry Discussions is pretty sure some very precise measurement and time calculations will be involved! The AOC welcomes Jess to the important role of ACDS director.



The new ACDS Director  
Jessica Lye

### Tomotherapy audits go full circle with a level III field trial



A modern Tomotherapy unit

The ACDS continues to be responsive to changes in the radiation therapy landscape in Australia and so has been working on new audits for one of the other types of treatment unit now appearing in several RT departments. Tomotherapy, the name given to a linac on a CT like ring has been slow to emerge in Australia but is gaining

momentum and consequently ACDS have been working on level III audits for this type of equipment. The AOC is able to report that field trials for Tomotherapy Level III IMRT & VMAT are expected to begin in the next couple of months. The ACDS has indicated the Tomotherapy field trials will be based

on the VMAT & IMRT work previously undertaken for level III linac audits. Not only does making use of the earlier work assist the efficiency of the development, but it contributes to a standardisation in MVT auditing that enhances quality and the possibility of inter-comparison with linac data. The AOC says 'well done' to the ACDS.

## Visits to the ACDS - a regulator occurrence



The primary standard is inspected during a visit

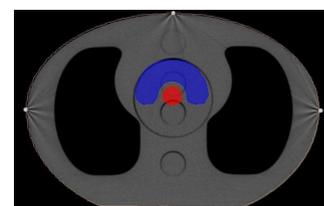
The ACDS is a unique service provider with many people - even from within the radiation sector— not sure what happens ‘back in the office’.

ACDS is housed at the ARPANSA facilities at Yallambie and has on site access to a fully functioning orthovoltage machine and a linac for dosimetry audit development and testing. This location also provides the ACDS with access to the Australian primary reference radiation standard and thus the ability to assess different types of radiation meas-

uring and dose reading equipment. It was therefore with great interest that a group predominantly composed of government radiation regulators from around the country recently gathered on a grey Melbourne day at ACDS headquarters to have some rays [of light] shed on the ‘behind the scenes’ workings of our national dosimetry auditing service.

The day was deemed a huge success with the jurisdictional regulators getting a first hand look into the equipment and audit processes of the

ACDS. Dosimetry Discussions has been told they all left with a real appreciation of how the ACDS and their audits – an organization whose core business assists in supporting the safety of the public – aids the regulators work undertaken for the protection of the population.



A CT scan of the ACDS phantom seen during the day and used in ‘end to end’ dosimetry audits.

*“the AOC believes it is in the best interests of the radiation oncology sector and the government to strengthen the practice standards”*

## Radiation Oncology Practice Standards Reviewed

The Standards Working Group of the Radiation Oncology Tripartite Committee have been working to review the Radiation Oncology Practice Standards (ROPS). This will be the first revision of the standards since they were initially published in 2011. As part of this review, the ROPS were put out for public consultation.

The AOC endorses the ROPS review and has taken the opportunity

to provide feedback. Dosimetry auditing in Australia has come a long way since 2011 and the AOC believes it is in the best interests of the radiation oncology sector and the government to strengthen the practice standards in relation to independent dosimetric auditing.

Dosimetry Discussions has been asked to pass on the thanks of the Standards Working Group to the many individuals and organisa-

tions who, like the AOC, provided feedback to the working group. This feedback is in the process of being considered by the committee before the revised ROPS go through the final approval process.

Those interested in receiving notification when version 2 of the ROPS are published can send an email request to [standards@ranzcr.edu.au](mailto:standards@ranzcr.edu.au)

## ROHPG & auditing: a quality marriage with safety off-spring

Recently the Australian Government undertook a review, and subsequently, a modification of the Radiation oncology health program grants (ROHPG) initiative.

As most DD readers will be aware ROHPG is a program funded by the Commonwealth to support the replacement of large capital items used in radiation therapy like linear accelerators.

The Commonwealth Department of Health (DOH) has full responsibility for administering the ROHPG Scheme, including ROHPG payments which are now decoupled from Medicare service volumes. Under the revised scheme – which commenced on 1st July - DOH has incorporated an idea initially put forward by the jurisdictional working group that was tasked by health ministers with developing the user-pays model for the ACDS.

Importantly, from July 2018, ROHPG payments will now be made on an

annual basis upon receipt of a dosimetry auditing certificate. Under the revised scheme, to be eligible for ROHPG payments, linear accelerators must participate in a dosimetry audit program that involves level I, II & III audits over a four year cycle.

To ensure the quality of the dosimetry audits DOH stipulates they must be conducted by an organisation with accreditation from the National Association of Testing Authorities (NATA) to ISO 17025.

The concept of linking ROHPG payments to dosimetry audits is also in line with a recommendation made by KPMG in an earlier review they undertook of the ACDS and its future development and is welcomed by the AOC.

It is reassuring to know that level of safety and quality support for radiation oncology in Australia is coming directly from the DOH. The AOC congratulates the Commonwealth on this proactive approach to incorporating a dosimetry audit require-

ment into the revised ROHPG scheme.

It is equally heartening to know that the ACDS is one such NATA accredited agency that has been objectively assessed to meet the iso 17025 standard for performance and approvals testing. In effect the auditor has been audited!

The iso 17025 is significant as it means the independent dosimetry audits conducted by NATA accredited providers like the ACDS can rightfully give Australian health ministers and the general public confidence in the accuracy of the radiation outputs of audited linacs treating patients in radiation therapy departments.

The Commonwealth Department of Health advises that if any individual or facility representative has any questions relating to the revised scheme, they should contact the ROHPG team via email at [radiation.oncology@health.gov.au](mailto:radiation.oncology@health.gov.au) or by calling (02) 6289 9847.

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