




# Radiation oncology training in Australia and New Zealand during and beyond the COVID-19 pandemic – lessons learnt and opportunities for improvement

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The severe acute respiratory distress syndrome coronavirus 2 (SARS-CoV-2) pandemic, more commonly known as the COVID-19 pandemic, has severely disrupted all medical specialties training throughout Australia and New Zealand (ANZ) over the past year, including that of the Royal Australian and New Zealand College of Radiologists (RANZCR) ('The College') Faculty of Radiation Oncology (FRO). Here, we would like to highlight several aspects of the FRO training that were impacted from the trainees' perspectives, including clinical training, education opportunities, examinations and post-fellowship opportunities. By drawing on the lessons learnt, we could hopefully facilitate continuing assessment and quality improvement measures to maintain a world-class radiation oncology training programme in ANZ.

## Clinical training

As the COVID-19 pandemic wave rose in early 2020, many ANZ radiation oncology departments quickly

adapted their clinical practice, within weeks, according to local government recommendations and restrictions as well as the College guidelines.<sup>1</sup> Changes included, but were not limited to, increasing use of telehealth consultations, delaying non-urgent radiation therapy (e.g. for certain skin cancers), encouraging the use of hypofractionated radiation schedules (adapted from evidence available to date), and reducing procedures (e.g. prostate brachytherapy). These changes have markedly reduced the clinical exposures that trainees would have gained in an otherwise normal clinical year. It is unclear how trainees will make up for this gap, either through extending training time, or through facilitated enhanced learning, as we look with optimism at life returning to normal. The increasing need for work-from-home arrangements in the peak of the COVID-19 pandemic also meant reduced on-site supervision, and it is reassuring that the College has taken measures to better outline the requirements for remote supervision as part of training site accreditation.<sup>2</sup> An unintended result of

reduced clinical workload and the work-from-home arrangement is that it has allowed trainees additional non-clinical time to consolidate their textbook knowledge in anatomy, radiation physics and biology as well as pathology in the lead up to examinations.

While many of the changes in clinical practice were temporary measures put in place in the face of the COVID-19 pandemic (with most departments now reverting back to working on-site), some changes are likely to be integrated into our routine clinical training and practice in the longer term. An example would be the telehealth consultation, which is hardly new and has been in practice in regional centres in Australia for many years.<sup>3</sup> We believe that in the post-COVID-19 era, telehealth will likely be more widely used. Future radiation oncology training may very well need to include and assess competencies related to remote clinical review, understanding its limitations and ability to incorporate remote clinical review methods into patient care safely.

## Virtual education

While many in-person educational workshops and scientific conferences have been deferred, or cancelled, in the peak of COVID-19 in 2020, it has opened up opportunities for increasing the use of virtual platforms for trainee education. For example, the SMART (Statistical Methods, Evidence Appraisal and Research for Trainees) workshop, an important annual FRO trainee education programme, had to be adapted into a live virtual interactive format at short notice. In the post-workshop survey, two-thirds of the trainees felt that the learning outcomes were largely met in the adapted virtual format, and over three-quarters would favour having a virtual option during future workshops.<sup>4</sup>

The increasing use of virtual platforms also means that ANZ-wide trainees can have access to additional shared educational opportunities throughout the year. A good example is the genitourinary cancer webinars by distinguished international speakers that was initially organised for Victorian trainees, which have over time developed into webinars coordinated through the Faculty of Radiation Oncology Genitourinary Group (FROGG) for ANZ-wide trainees. We foresee that many of these virtual education opportunities will continue to grow and flourish in the post-COVID-19 era, as it allows flexibility for attendance and participation for trainees from every corner of ANZ.

## Examinations

The COVID-19 pandemic has created much stress for the College staff and board of examiners, who grappled with an altered examination format and the ever-changing COVID-19 restrictions in multiple jurisdictions across ANZ. It has also led to significant distress to trainees, working with changing timelines in preparation for such

high-stake examinations. The eventual successful completion of the Phase 1 and 2 examinations in 2020 brought much relief; however, there is much to learn about the conducting of future examinations series.<sup>5</sup> We believe that an electronic examination may be the way moving forward for the written examinations. We acknowledge that the complexity of the logistics and potential cost required to develop and implement robust electronic examinations should not be underestimated. Comprehensive contingency plans should be put in place in the event of information technology glitches, or we may find ourselves in the unfortunate circumstances other medical specialty colleges experienced in 2020 when the examination could not be delivered. The recent Phase 2 viva examinations conducted successfully via virtual platform has also opened up the potential of recording the examination process itself. This may provide an extra layer of a quality assurance, allowing the board of examiners to re-review the recorded examinations, in situations where a candidate was deemed to have demonstrated marginal competency.

## Post-fellowship training

The deferred examinations during the COVID-19 pandemic bear significant knock-on effects for trainees' post-fellowship plans and arrangements. Senior trainees often begin arranging fellowships before examinations, some up to a year in advance in the case of established fellowship programmes such as at the Princess Margaret Hospital in Toronto, Canada, with the intention of commencing the fellowship post-examinations. Unfortunately, there were trainees who have had to defer, or cancel, their overseas fellowship plans as a result of the deferred examinations and the inability to travel overseas regardless of examination timing or outcomes. Some of the College-endorsed overseas fellowship programmes such as the Windeyer fellowship have allowed deferral of fellowship commencement until international travel restrictions are relaxed. This has created an unprecedented demand for local fellowship opportunities or radiation oncologist consultant positions within ANZ. It is however reassuring to see that many ANZ centres are committed to creating and setting up local fellowship opportunities for post-examination trainees.

## Moving forward

There is no doubt that the COVID-19 pandemic has caused substantial disruption to radiation oncology training in every jurisdiction throughout ANZ to a varying degree over the past year, and it may have far-reaching impact on the graduating trainees in the coming years. However, this difficult period has provided a unique opportunity for the radiation oncology community (from trainees, to fellows and College staff) to engage in broader conversations to maintain, and further enhance,

the quality of radiation oncology training in ANZ. Some of the specific recommendations for further improvement include, but are not limited to: (i) developing learning tools and assessment methods to match the ongoing need for remote clinical review (via telehealth) where appropriate; (ii) maintaining and refining the delivery of virtual learning methods and sessions; (iii) modernising our approaches to fellowship examinations in the digital era while maintaining the necessary quality assurance process; and 4) continuing to expand on ANZ institutional capacity and expertise to allow for post-fellowship training within ANZ.

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