

COVID-19 ESSENTIAL ROLE OF CLINICAL RADIOLOGY SERVICES

Call for Action

Australian and New Zealand governments must ensure that:

- **Patients can have access to vital radiology services when they need it**
- **All private and public clinical radiology departments and practices have access to PPE throughout the pandemic.**

Clinical radiology plays a central role in modern medicine, informing clinical decision-making by supporting diagnosis, treatment planning, monitoring and a range of interventional treatments. This includes supporting multiple patient pathways across primary, secondary and tertiary healthcare.

Clinical radiology is delivered in hospitals and community practices by a team of healthcare professionals, including clinical radiologists, radiographers or medical imaging technologists, sonographers, medical physicists and medical imaging nurses.

Delivery of care in clinical radiology requires close personal contact with patients who may be suspected or known cases of COVID-19 receiving care related to COVID-19 or related to other disease(s).

As our health systems begin to be impacted by COVID-19, it is crucial that these services whether affiliated with public hospitals or not, receive the resources and support they require to ensure service provision continues.

Advice regarding infection control in COVID-19 disease

The World Health Organisation declared novel coronavirus (COVID-19) a pandemic on 11 March 2020.¹ Both Australia and New Zealand are seeing patients presenting with respiratory disease either suspected or known to be due to COVID-19. This caseload is only projected to continue to grow.

The Royal Australian and New Zealand College of Radiologists (RANZCR) has provided advice to members on guidelines for infection control for clinical radiology and radiation oncology in practices and departments.² It is also keeping members abreast of advice on imaging guidance and findings.

Clinical radiologists and radiology practices perform a vital role in the diagnosis and care of patients with acute respiratory illnesses such as COVID-19. Imaging is used to:

- Evaluate disease severity and assess for complications

¹WHO Director-General's opening remarks at the media briefing on COVID-19 – 11 March 2020. [Internet]. World Health Organisation. [cited 2020 Mar 12]. Available from <https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>

² STR/ASER COVID-19 Position Statement. Society of Thoracic Radiology. [Internet] 2020 Mar 11 [cited 12 March 2020]. Available from: <https://thoracicrad.org/>

- Aid in distinguishing COVID-19 from other causes of similar symptoms such as community-acquired lobar pneumonia, malignancy, pneumothorax, and pulmonary embolism.

In addition to presentations directly related to COVID-19 disease, patients with or without suspected or known COVID-19 disease will continue present acutely unwell due to other diseases, and for diagnosis and follow-up of diseases such as cancer.

Ensuring Continuity of Clinical Radiology Services in the Community

Radiology practices and services are reporting difficulties in accessing personal protective equipment for their staff.

Lack of adequate personal protective equipment (PPE) for radiology practices and services that are not affiliated with public hospitals will potentially result in patients with and without COVID-19 disease being referred to public hospitals due to the inability of community-based practices to adequately protect their staff.

Lack of PPE increases the risk of transmission of COVID-19 to vital staff within radiology practices, potentially leading to self-quarantine, illness and temporary reduction in availability of services to communities. In clinical radiology, this is especially significant in regional areas that are already underserved by medical imaging providers. It has the potential to exacerbate the burden that will be borne by public hospitals in the diagnosis and treatment of patients with possible COVID-19 infection in addition to existing clinical workloads.

Clinical radiology staff need access to PPE to continue to provide services to patients who may be suspected or known cases of COVID-19 receiving care related to COVID-19 or related to other disease(s), and to patients without COVID-19 disease.

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This statement is supported by:



The Royal Australian
and New Zealand
College of Radiologists*

Royal Australian and New Zealand College of
Radiologists



australian diagnostic imaging association

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Australian Society of Medical Imaging and Radiation
Therapy



Medical Imaging Nurses Association of Australia



New Zealand Institute of Medical Radiation Technology

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Glossary of Terms

COVID-19	Novel Corona Virus disease 2019
CT	Computed Tomography is a radiologic imaging modality that uses computer processing to generate an image of the tissue density in a “slice” as thin as 1 to 10 mm in thickness through the patient's body. These images are spaced at intervals of 0.5 to 1 cm. Cross-sectional anatomy can be reconstructed in several planes without exposing the patient to additional radiation.
HR	High Resolution – referring to diagnostic images
PPE	Personal Protective Equipment
RT- PCR	Reverse Transcriptase Polymerase Chain Reaction is a sensitive laboratory technique of molecular biology used to detect RNA and surface proteins. It can identify the COVID-19 virus.