



The Royal Australian and New Zealand College of Radiologists®

RANZCR Response to the Australian Digital Health Agency *Your health. Your say. Consultation*

About The Royal Australian and New Zealand College of Radiologists

The Royal Australian and New Zealand College of Radiologists (RANZCR) is the peak body advancing patient care and quality standards in the *clinical radiology* and *radiation oncology* sectors. It represents over 4,000 medical specialist members in Australia and New Zealand.

RANZCR's role is to drive the appropriate, proper and safe use of medical imaging and radiation oncology services in the community. This includes supporting the training, assessment and accreditation of trainees; the maintenance of quality and standards in both specialties, and workforce mapping to ensure we have the staff to support the sectors in the future.

Clinical radiology relates to the diagnosis or treatment of a patient through the use of medical imaging. This includes the use of plain X-ray, computed tomography (CT), magnetic resonance imaging (MRI), ultrasound and nuclear medicine and PET to produce images that are interpreted by a radiologist to aid them and other clinicians in the diagnosis and treatment of their patients. This includes pre-natal care (obstetric ultrasounds), to neonates and children through to the elderly, from dating scans to non-invasive treatment for cancer. Radiology touches people throughout their life.

Radiation oncology is a medical specialty that involves the controlled use of radiation to treat cancer either for cure, or to reduce pain and other symptoms that it may cause. Radiation therapy is involved in the treatment of almost all cancers, anywhere in the body, and can benefit one in two cancer patients.

General Comments

RANZCR welcomes the opportunity to contribute to the development of Australia's national digital health strategy. The establishment of the Australian Digital Health Agency (Agency) is a positive step towards ensuring a strong digital healthcare system, and RANZCR looks forward to collaboration with the Agency across a range of initiatives where we share a common goal. The new emphasis on co-production and collaboration on digital health solutions is particularly important for ensuring that government and the various stakeholders are working towards the same ends, to best serve the needs of the Australian People.

Diagnostic imaging is already inherently digital, and significant work has been undertaken to enhance the capacity of the diagnostic imaging sector to embrace new technology and utilise it effectively to improve patient outcomes. RANZCR, in collaboration with the Australian Diagnostic Imaging Association (ADIA), has worked closely with the Commonwealth Department of Health and the National eHealth Transition Authority (NeHTA) in the past to develop the "e-Health Diagnostic Imaging Report Specification", which addressed the uploading of diagnostic imaging reports to the (then) PCEHR. RANZCR and ADIA also developed, and presented to the Diagnostic Imaging Advisory Committee, the ADIA-RANZCR Roadmap, a more comprehensive pathway to image and report sharing via digital communications. This roadmap was developed based on existing standards and profiles for information-sharing and interoperability between diagnostic imaging providers and referrers, which should be leveraged and built on, as far as possible, rather than duplicated by new systems built from scratch. This will be particularly important as the sector moves towards more seamless sharing of diagnostic images and reports, and should be adopted federally to ensure consistency across Australia. These issues are discussed

further in 'Securing Quality Outcomes: Systemised Access to Digital Images' a joint publication of the RANZCR and the Australian Diagnostic Imaging Association (ADIA).¹ Note that future discussions will need to consider technologies that have been developed considerably since the Roadmap was prepared, such as FHIR and DICOMWeb.

Some key foundational work must be undertaken to facilitate the uptake of digital communications in diagnostic imaging and more broadly across the healthcare system. This includes incorporating the Individual Health Identifiers (IHI) (which have not been taken up in diagnostic imaging as there has been no incentive or need until now); rolling out secure messaging; fostering electronic referrals (to streamline the introduction of the IHI and reduce the need for paper); and, providing access to reports and historic diagnostic images. Further detail on these areas is provided below.

RANZCR has been active in the digital health space for many years, due to the advanced technology utilised in both clinical radiology and radiation oncology. The RANZCR Standards of Practice for Diagnostic and Interventional Radiology are designed to harness the capacity of digital technology to improve patient care and facilitate best-practice service delivery. RANZCR has also produced engaging consumer information portals such as Inside Radiology² about diagnostic imaging and Targeting Cancer³ for radiation therapy.

Further work is also currently being undertaken to develop:

- RANZCR Imaging Guidelines – providing decision support tools for referring doctors; and
- Revised Teleradiology Standards – which will form a new chapter in the Standards of Practice and govern the delivery of teleradiology services in Australia.

We would welcome an opportunity to discuss these developments with the Agency in the near future.

In response to the *Your Health Your Say Discussion Paper* and targeted survey questions relating to clinicians, healthcare workers and healthcare providers, RANZCR can provide the following feedback.

1. How would healthcare workers like to use data and technology to support them to make better treatment decisions?

Enabling the use of data and technology by healthcare professionals to support treatment decisions and improve patient outcomes requires improvements in the following areas:

Secure Messaging

Better integration of IT solutions into service delivery is required, ideally with minimal disruption to patient care and service delivery. Healthcare providers require seamless, secure and timely access to patient information, however the independent data repositories across health care settings are poorly linked, impacting on communication and the coordination of care. These disconnected settings include:

1. Public hospital - acute care through emergency departments

¹ Available on the RANZCR website: <http://www.ranzcr.edu.au/quality-a-safety/ehealth>

² www.insideradiology.com.au

³ www.targetingcancer.com.au

2. Public hospital - booked admissions
3. Public hospital - outpatients
4. Private hospital - emergency departments
5. Private hospital - booked admissions
6. Private specialist's rooms
7. Stand-alone general practitioners
8. General practice 'clinics' with ancillary services
9. Third party pathology and radiology providers, be it in a public hospital, private hospital or community setting.

Diagnostic imaging supports clinical decision making across the healthcare system. Imaging practices face considerable challenges if not complete barriers when attempting to share referral information, reports and images across the range of settings outlined above, and would benefit significantly from a secure messaging system that allows healthcare workers to communicate seamlessly across these settings.

There are several components needed to deliver a genuinely interoperable secure messaging system, including standardised procedures for data exchange (test results, images); a method to close the referral-reporting loop, and confirm that it has been closed; standardised terminologies; greater use of structured data; and a reliable, accessible, verifiable and widely used universal identifier system.

The secure messaging system should also link to a database of health resources such as Choosing Wisely, decision support and information about tests and procedures such as Inside Radiology⁴.

Access to Historic Images

Related to this, all too often imaging services are repeated where the prior images or reports are unavailable or lost. Ensuring access to prior imaging results would significantly increase the timeliness of care provided to patients and prevent duplication, reduce risk to the patient, and make better use of limited resources. As noted in the introduction, RANZCR and ADIA have developed a roadmap to enable access to historic images¹, and we welcome further discussion with the Agency around this important resource.

Patient Identifier

A reliable method of patient identification is key to making progress and ensuring that healthcare workers are assured that the information relates to the correct patient. To date, there has been little uptake of the IHI across healthcare due to lack of a practical purpose in most settings, including in Radiology Information Systems (RIS) and Picture Archive and Communication Systems (PACS).

Moreover, there is no general agreement on how and why the IHI might be incorporated into radiology practices. Prior to the incorporation of the IHI, there needs to be widespread agreement across Government and amongst healthcare settings and providers as to the purpose, benefits and appropriate use of the IHI and importantly, which other identifiers it will be used to replace as currently it is *just another identifier*.

eReferral

One of the most obvious channels for seamless and reliable transfer of patient information is through electronic patient referral. Despite the obvious benefits of timely

⁴ www.insideradiology.com.au

and accurate information flow, electronic referrals for diagnostic imaging (which might assist in the uptake of the IHI) are still uncommon, especially from specialists. RANZCR would like to see a clear commitment in the Agency's strategy to move away from paper and fax referrals towards secure messaging referrals. This would also provide an opportunity to determine how best to integrate the IHI.

RANZCR is happy to discuss methods that might be considered to ensure that competition remains possible in such a scenario, as the Government has previously worked to ensure patient choice with regards to imaging providers.

Orderables Catalogue for DI

Due to the wide array of medical tests, procedures and treatments available in clinical radiology, patient care would also benefit from a standardised catalogue of orderable examinations. At present, there are regional catalogues (for example in Queensland) but no national approach. Moreover, systematic integration with established systems such as SNOMED and or LOINC does not appear to have been attempted. Other overseas models such as the current Radlex/LOINC harmonisation project in the US may be helpful here. RANZCR is available to discuss this further with the Agency in due course.

Radiation Oncology Dataset

RANZCR would like to see the establishment of a minimum radiation oncology dataset, ideally incorporated into a national cancer dataset, to support future workforce and services planning.

Radiation oncology facilities should have the capability to collect comprehensive data sets, including treatment details, and should comply with the requirements of a national dataset. Radiation oncology treatments should be integrated into comprehensive electronic medical records, and strategies for data support and sharing between treatment facilities must be in place.

2. What gets in the way of health professionals being able to connect, communicate and coordinate with the right people?

There are several barriers at present which impact on the ability of healthcare professionals to connect, communicate and coordinate across the system, and addressing these barriers should be a priority in the national digital health strategy.

Barriers include the lack of interoperability of healthcare systems and data between public and private providers, community based healthcare and hospital care systems. Standards exist in some areas, such as diagnostic imaging, however we are far from having genuinely interoperable informatics in health. Moreover, we currently lack a secure messaging system for clinicians to safely and securely communicate across multiple points of patient care, which is vital given the nature and complexity of our modern healthcare system.

Workforce Literacy

RANZCR also sees a need for increased IT literacy across healthcare professionals and management to engender a culture shift that incorporates digital health into every day healthcare. Collaboration between the Agency, medical colleges and other healthcare professional bodies is required to develop a system wide strategy for improve health IT literacy, which is not the same as IT literacy in general.

Uptake of My Health Record

Another major barrier is the lack of uptake of My Health Record, which although not the primary source of information about a patient, has the potential to reduce the fragmentation of health information and greatly enhance information sharing, including information about historic imaging.

There would be significant flow on benefits from the inclusion of diagnostic imaging reports and importantly, access to images in My Health Record (rather than storage), which will provide a further incentive for other healthcare professionals to use it. RANZCR sees this as complementary to the requirement to use My Health Record for patients with chronic medical conditions under the health care home model.

For clinical radiology in particular, the lack of relevance and therefore uptake of the IHI remains a barrier to the successful implementation of My Health Record, hence the emphasis on this point above.

Individual Health Identifier

Adoption of the IHI in diagnostic imaging will take time and resources rather than a complex technical solution, however it would assist greatly in confirming the identity of the patient, and starting to dismantle silos of health information, once used across the system.

The IHIs have the potential to improve record matching, including the matching of diagnostic imaging studies performed at different times and places, however it should be noted that more work is required to develop a standard approach to the adoption of IHIs in existing file formats in diagnostic imaging (notably DICOM), and to promote the adoption of such an approach.

Legal, regulatory and payment system barriers to the uptake of IHI should also be reviewed, as well as how it will be used in conjunction with the variety of other identifiers in routine use.

Clarity over Data Ownership

There is a lack of clarity over data ownership, responsibilities for record keeping and privacy information.

Related to the issues above, the legislative and regulatory frameworks across federal and state levels prohibit the effective sharing of data across the unconnected healthcare provider systems. Data fragmentation is in large part a product of the structure of the Australian healthcare system; the range of Commonwealth, state and territory government agencies responsible for regulating, funding and administering health; and the range of legal and regulatory policies that differ between federal and state levels.⁵ For example, each of the healthcare settings listed above (under question one) have independent data repositories of health service data with limited or no links to other datasets.

Furthermore, there are multiple identifiers in use for multiple purposes at both federal and state level, including Medicare numbers, private medical insurance numbers and the IHI which hinder effective verification prior to data sharing.

⁵ Srinivasan, U., Rao, S., Ramachandran, D., & Jonas, D. 2016, Flying blind: Australian Consumers and Digital Health, Volume 1: Australian Health Data Series, Health Market Quality Research Program, CMCR, Sydney.

Some form of consent is needed to release patient information to another party in the healthcare system. Without having a unified or consistent framework for this, providers will err on the side of caution and not share information, which is a significant barrier to digital health. A solution to this also needs to consider how to reassure the public that there are major benefits to sharing clinical information and when their data is transferred, it will be done through a secure channel.

3. What do health professionals need to be able to effectively connect, communicate and coordinate with the right people?

Improvements in several key areas are necessary for health professionals to more effectively connect, communicate and coordinate, including:

- Access to details of when, why, where and who provided care and who will follow up after it
- A reliable way to find the right person or at least someone who will be able and willing to take responsibility for following up on important or unexpected as well as routine results generated as part of their care in clinical radiology
- Unique, simple, verifiable patient identification without replication of processes already in place (such as the use of the name, DOB, address, Medicare number, hospital ID, practice ID, etc.) which has a high uptake throughout the public and private sectors
- Clear protocols defined for data communication
- Two-way communication between the public and private sectors, between States and Territories
- As noted in the RANZCR submission to the eHealth Records and HI Discussion Paper⁶, the 'opt-out' model of the MyHealth Record (formerly Personally Controlled Electronic Health Record) could significantly boost uptake
- An interoperable secure messaging system, preferably linked to a database of health resources; standardised procedures for data exchange (test results, images), closing the referral-reporting loop, and confirming that it has been closed; standardised terminologies and greater use of structured data.

4. What should be the immediate priority initiative for the My Health Record to ensure it delivers real value for healthcare professionals?

RANZCR believes that it is fundamentally important to boost uptake of the My Health Record among consumers, and to focus on 'low hanging fruit' that will provide reasons for health professionals to use it. Regarding uptake, we are optimistic that the opt-out model will assist greatly, however a significant proportion of consumers will need to have a My Health Record to stimulate real interest from clinicians.

RANZCR strongly believes that healthcare professionals will be motivated to use My Health Record if it holds valuable information that improves the quality of care, for example diagnostic imaging reports or pathology test results. Diagnostic imaging reports often hold valuable information about historic presentations and findings, which can greatly aid immediate care and clinical decision-making. Moreover, access to historic reports can also significantly reduce the need for further testing, and prevent duplication of tests already performed. In these ways, the incorporation of diagnostic

⁶ Available on the RANZCR website: <http://www.ranzcr.edu.au/advocacy/submissions>

imaging reports and images to My Health Record would provide a significant 'public good' or benefit for the whole healthcare system.

Through this process, consideration will need to be given to the implementation costs, and follow on cost implications, for radiology practices e.g. resulting from requests for historic images. Notwithstanding this, RANZCR sees considerable benefits for the entire health system from the roll out of My Health Record, which would more than offset the allocation of resources. RANZCR would welcome the opportunity to assist with this work and has nominated clinical leads available to support the Agency in this task.

The allocation of resources to hospitals, private practices and cancer treatment facilities to boost uptake and use, as well as training opportunities for both consumers and health professionals, must also be considered to ensure the success of the My Health Record.

5. How could data and technology be better used to improve health and wellbeing?

Please refer to the answers to the questions above which relate to access to historical imaging, electronic referral, use of My Health Record and the IHI.

In addition, RANZCR sees a host of potential benefits through enhanced use of technology including:

- guiding and tailoring investigations based on accurate patient information and guiding patient management
- reminders for patients to attend for appropriate screening (e.g. breast, colorectal);
- risk assessments to indicate when specific screening is appropriate (i.e., high-risk patients);
- longer term epidemiological studies of risk factors, test and treatment effectiveness.

Essentially a health service that can share data and information securely and quickly across healthcare settings would go a long way to addressing "silos" in healthcare, which fragment and degrade patient care and increase cost.

Conclusion

Thank you for the opportunity to make a submission to this consultation. RANZCR looks forward to assisting the Australian Digital Health Agency in the digital transformation of the Australian healthcare system.

For further information, please also refer to RANZCR's submission to the Department of Health's consultation on the eHealth Records and Health Identifiers discussion paper⁷.

**The Royal Australian and New Zealand College of Radiologists
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⁷ Available on the RANZCR website: <http://www.ranzcr.edu.au/advocacy/submissions>