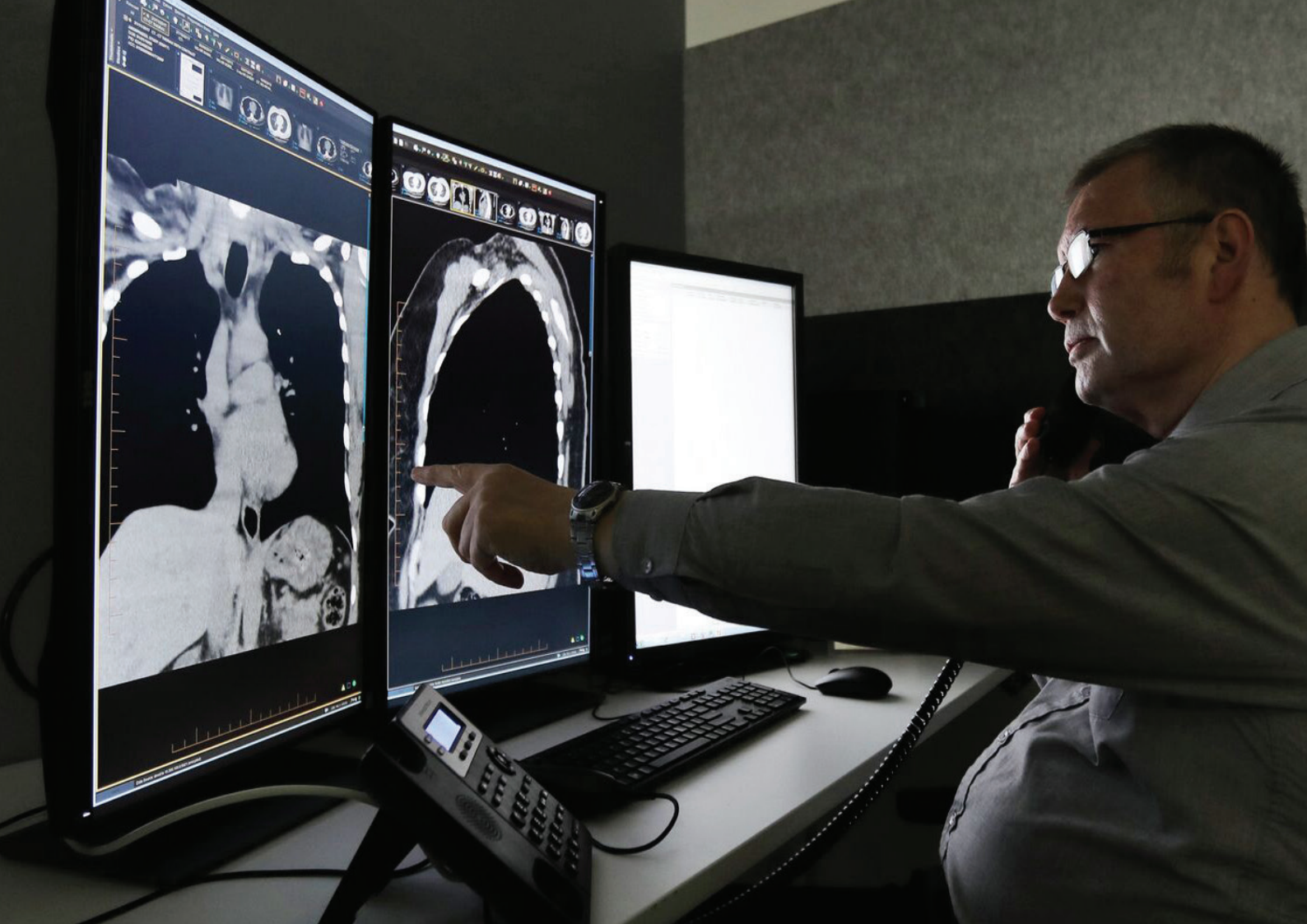


Working with industry:
a key factor in embracing innovation and enabling
advancement of our National Digital Health Strategy.



Australia's National Digital Health Strategy takes the position that "Digital information is the bedrock of high-quality healthcare"

The Strategy recognises that along with investment from the states and territories, private sector organisations will be key players in the delivery of innovative products, services and programs that improve health and care experiences and address Australia's greatest health challenges.

For Australia to realise its goals with our National Digital Health Strategy it is imperative that our government and healthcare leaders are encouraged to work with industry, embrace innovation and support and enable our healthcare workforce to adapt to and adopt advances in digital health technology.

Embracing innovations, infrastructure and service offerings from private sector organisations will support the delivery of improved health care by our state, territory and private healthcare providers. By taking the right actions as guided by the Strategy we can enable a truly cohesive health sector with seamless connections between providers, a nationally consistent approach to the delivery of care and a more customer centric and patient outcomes focussed approach.

In this paper we explore the specific area of diagnostic imaging (radiology) and the benefits of encouraging the adoption of teleradiology as a key component of our National Digital Health Strategy.

"Private sector organisations will be key players in the delivery of innovative products, services and programs"

Diagnostic Imaging and Teleradiology - a key component to enabling Digital Health.

Radiology is a critical component of our health system and advances in technology have already enabled vast improvements to diagnostics and reporting. We still face challenges though, in particular in the support of our radiology workforce and in the sharing of imaging data across jurisdictions and sites.

Making it possible for hospitals and healthcare providers to access diagnostic imaging and reporting services any time of the day or night, and from all locations, not just major metropolitan facilities is a key improvement that Digital Health (teleradiology) enables for our patients, radiologists and healthcare providers overall.

The adoption of teleradiology has been growing in Australia and globally¹ and the benefits are evident in the improvements to patient outcomes, employee wellbeing and hospital operations in the locations where it has been adopted.

In Australia, adoption rates in rural and remote areas have been the highest. In these regions where there is either a lack of facilities or qualified radiologists (or both) there are clear benefits being derived by working together with industry to complement existing models of care.

Regardless of location though, there are several other reasons why it makes sense for the Digital Health Strategy to guide our hospitals and health services to work with teleradiology providers, enabling collaboration and fostering adoption.

Across the country there exists the perfect storm of growth in demand, a shortage of radiologists, an ageing workforce and high costs in recruiting. This means our radiologists are sometimes unavailable or they are fatigued and pressured from being expected to work longer hours and across areas that may not be their speciality; in turn leading to negative impacts on patient outcomes (not to mention staff wellbeing).

So why is there still some resistance to the adoption of teleradiology in a provider's own model of care and digital health operations, particularly those in metro areas? In some cases, it may simply be that a hospital has enough specialist staff to meet demand or that the benefits of on-demand teleradiology are unclear. In other cases though, it could be difficulties in technical integration across sites or fears around patient data security that present barriers to adopting this digital health service. The latter two of course being key areas that our Digital Health Strategy is designed to overcome.

Interoperability - the link with radiology

The emphasis on interoperability in our National Digital Health Strategy is encouraging and if tackled correctly Australian healthcare providers and patients will reap the benefits of consistent data access and secure, seamless data sharing across sites and borders.

There remains a lack of standards between states though, and indeed across sites within states, which can lead to variances in integrations and information flow between hospital and healthcare sites. This presents a significant barrier to data sharing, particularly digital image sharing - a key component of true digital health.

Teleradiology providers currently integrate into RIS and PACS at the individual hospital site level. An opportunity exists though for our national Strategy to support investment in a consistent point of integration (either at a state level, or ideally, nationally), creating a standards-based interface to enable better access to teleradiology services on demand for all health districts. This would simplify the ability for a hospital or health facility to access teleradiology services on an as needs basis; enabling an on-demand model without significant initial financial outlay.

Indeed, a nationally integrated database would also enable the networking of public radiology departments, allowing for better resource sharing across borders and improved access to services.

Concerns around patient privacy and data security are meaningful. For the Strategy to be successful, systems and processes related to data sharing should meet internationally recognised security standards (e.g. ISO27001 accreditation).

¹According to Future Market Insights, the global market for teleradiology is presently valued at US\$1.9 Bn and is anticipated to be worth US\$13.2 Bn by the end of 2026, reflecting a CAGR of 21%. The APEJ region (including Australia) will record the fastest growth at 24.6% CAGR. Source: "Teleradiology Market: Global Industry Analysis and Opportunity Assessment, 2016-2026,"

So how would aligning with industry help us overcome some of the barriers to digital health?

The National Digital Health Strategy recognises that innovative companies are crucial to developing the new digital health products and services that Australia needs. It also recognises that we must create an environment for healthcare providers and consumers to gain access to innovative technologies.

This means that the framework for actioning our Strategy needs to support creation of the physical environment to enable collaboration, particularly in the area of interoperability; but just as importantly the Strategy must guide the sector to recognise and embrace the cultural change required to adopt and utilise digital innovations. To enable this, we must educate our leaders; train, support and empower our workforce; and change our mindset as a healthcare community to make it ok to partner with industry; complement in-house teams; share knowledge and collaborate across specialities.

According to the Framework for Action, Government's role in the delivery of a thriving digital health industry is

to support industry and innovators to foster an agile and self-improving health system that is sustainable.

A key mechanism in making this a reality is to facilitate meaningful partnerships both locally and internationally - learning from successes of healthcare providers, researchers and private sector organisations both here and overseas. A transparent and collaborative approach is critical.

When it comes to the areas of workforce and education, the Strategy lists priority actions of supporting the adoption of digital health by the workforce and embedding digital health in training as well as the integration of digital health into national standards and accreditation requirements.

As we rollout the National Digital Health Strategy, teleradiology providers are one of several industry representatives that our government can work with to support advances in digital health.

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