ADIA
australian diagnostic imaging association

2014-15
BUDGET SUBMISSION

Australian Diagnostic Imaging Association

ADIA represents medical imaging practices throughout Australia, both in the community and in hospitals. It promotes the ongoing development of quality accreditation standards and appropriate funding settings so that Australians can have affordable access to quality medical imaging services. This supports medical imaging's central role in the diagnosis, treatment and management of a broad range of conditions in every branch of medicine.

President's Message

ADIA is committed to promoting quality diagnostic imaging services, and ensuring that all Australians can access affordable diagnostic imaging.

With the cost of health care set to continue rising as our population ages, it is essential that Australia embraces those innovations in medical knowledge and technology which not only improve the standard of diagnosis and treatment, but also reduce overall costs to our strained health system.

In this respect, diagnostic imaging is leading the way.

With advances in technology offering earlier and more accurate diagnosis, and more targeted treatment options, GPs and specialists are increasingly relying upon diagnostic imaging to help give the best care to their patients – it really is transforming medicine.

However, Australians are missing out on all the benefits of these medical advances and new technology because diagnostic imaging is not appropriately funded and quality standards are not assured. Policy settings should ensure that a wide range of quality diagnostic imaging services are affordable and accessible for all patients.

Medicare rebates for diagnostic imaging have not been indexed since 1998, which is effectively an ongoing year on year policy of real cuts to patient rebates. This lack of indexation urgently needs to be addressed. The period of these cuts generating desirable efficiencies across the sector has now passed, and now the rebate cuts are matched by service cuts or increases in patient gaps. With the current rebate freeze and funding biased towards low cost providers of low clinical value services, the net effect is that patients are put at risk and health outcomes are compromised.

Sadly, the decline in access and affordability is being most keenly felt by the sickest patients, who tend to need the most complex services. The services they need will be increasingly further out of their reach until appropriate funding and policy settings are restored.

ADIA recognises that the Government is operating in a very difficult fiscal environment. With this in mind, in this Budget Submission ADIA presents a mix of policy and funding recommendations that have been developed in consultation with the Department of Health and the Royal Australian and New Zealand College of Radiologists. These recommendations are cost neutral or provide a saving to the Budget:

- introduce enforceable quality criteria through practice accreditation for Medicare-eligible Diagnostic Ultrasound, to ensure that rebates for Ultrasound services are appropriate.
- introduce enforceable quality criteria through practice accreditation for CT services, to assure patients that services are delivered to an appropriate standard and address concern about radiation risk and inappropriate imaging;
- improve equipment upgrade provisions to support quality investment; and
- streamline diagnosis and treatment through improved access to patient images.

The systemic issues facing the diagnostic imaging sector – and the Budget – are complex. ADIA proposes that the Government work with stakeholders on the next phase of the Quality Framework, with a view to increasing the efficiency of Government spending to fund indexation and patient access to quality services.

ADIA looks forward to working collaboratively with the Government and other stakeholders to deliver these reforms.

Dr Chris Wriedt

President

Radiology

Radiology procedures have become an essential tool in the diagnosis, treatment and post-treatment of a broad range of clinical conditions. Radiologists are medical specialists who work with a team of allied health professionals to capture and then interpret diagnostic quality images. The radiologist relates the image interpretation and diagnosis to the clinical context of the patient and provides a specialist medical opinion in a report to the referrer.

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DEXA (Bone Densitometry) Scan

A DEXA (Dual Energy X-ray Absorptiometry) scan is a safe, painless and non-invasive examination used to measure the bone mineral content in various parts of the body (such as the spine, hip and wrist). Bone densitometry is most often used to diagnose osteoporosis, a condition that often affects women after menopause but may also be found in men. DEXA is also effective in tracking the effects of treatment for osteoporosis and other conditions that cause bone mass and density loss.

Recommendations

In the 2014-15 Budget, ADIA recommends that the Government progress proposals that have been developed in consultation with the Department of Health, the Royal Australian and New Zealand College of Radiologists (RANZCR) and other stakeholders.

1. **Address priority proposals from the ADIA and RANZCR *Quality Framework for Diagnostic Imaging*, enhancing standards using accreditation in line with the Department of Health's *Review of Funding for Diagnostic Imaging Services*.**

    a. **Clarify the quality criteria for Medicare-funded Ultrasound for diagnostic purposes, and improve Medicare fees and fee relativities to ensure that rebates better reflect the cost of delivering services**

    Criteria for Medicare-funded Diagnostic Ultrasound should be clarified to ensure that services are delivered by providers who hold a minimum Ultrasound qualification, at practices which meet minimum equipment standards.

    Ultrasound fee increases should be targeted to underfunded items in the General, Musculoskeletal, O&G and Urological Ultrasound subgroups (which have average fees almost 50 per cent lower than other subgroups), to improve fee relativities within Diagnostic Ultrasound and support access to important Ultrasound services by reducing patient gaps.

    b. **Clarify the quality criteria for Medicare-eligible CT services to address concern about radiation risk and inappropriate imaging**

    Clearer accreditation standards would help address concerns about the radiation risk associated with CT. These include a defined minimum radiologist attendance standard at practices delivering CT services, to support current regulation requirements that are not being enforced due to a lack of specificity. These standards would be supported by exemptions and modifications for rural and remote practices and emergency presentations.

2. **Improve the effectiveness of the capital sensitivity upgrade provisions for CT, angiography and MRI equipment to support quality investment**

    This would prevent quality equipment being scrapped.

3. **Commence a phased introduction of the Roadmap for Securing Quality Outcomes: Systemised Access to Digital Images to support patient care, developed in consultation with RANZCR and the Medical Software Industry Association of Australia**

    This would create a common standard for image storage and archiving and for retrieval of digital images, delivering significant clinical benefits and cost savings to patients and the Government by reducing the need for repeat imaging.

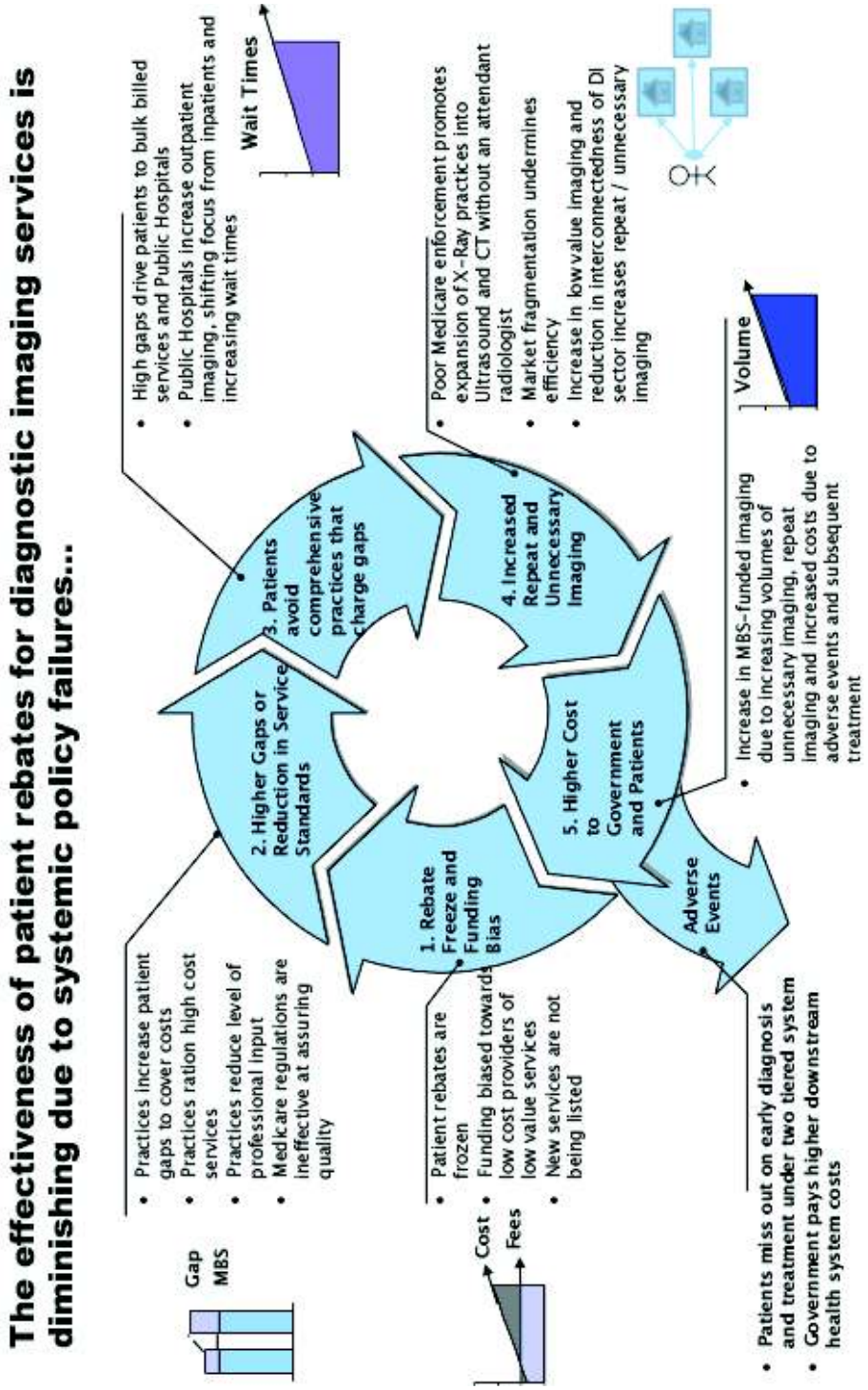
Forward work plan

Following the Budget, urgent work needs to take place to address significant systemic issues in diagnostic imaging brought about by the current freeze in Medicare rebates and the bias in funding towards low cost providers of low clinical value services. The Government should work methodically with the sector to design a second phase of the Quality Framework to support efficient resource allocation, quality practice by all practice types and indexation of patient rebates.

In particular, ADIA would be seeking appropriate additional Medicare funding to support quality comprehensive diagnostic imaging practices; and a revised Medicare funding structure to rebalance diagnostic imaging funding to reflect the range, value and cost of different provider types.

These reforms would be designed to broaden patient access to quality diagnostic imaging services, reduce repeat and unnecessary imaging, improve patient equity, and ensure that growth in the sector is focused on clinically appropriate, quality diagnostic imaging services. This would help the sector deliver on diagnostic imaging's potential to transform medicine by improving patient outcomes, reducing the burden of disease, and lowering system-wide health expenditure.

Systemic policy failures in diagnostic imaging



Source: Adaptation of Pacific Strategy Partners presentation "Realising our Potential: A Vision for the Future of Medical Imaging in Australia", October 2013

What is happening to quality diagnostic imaging?

Existing funding and policy settings have created a series of systemic problems which undermine access, affordability, quality and efficiency of diagnostic imaging in Australia. If they persist, the long term cost of diagnostic imaging and services will be high, the flow on health sector savings that quality diagnostic imaging services can deliver will be compromised, and public hospitals will be overburdened by outpatient services.

This submission overviews the current policy and funding challenges, and the impact and implications in the context of Government policy objectives.

Current funding and policy challenges

- *Medicare fees for diagnostic imaging are constrained*

  Under several Memoranda of Understanding (MoU) between 1998 and 2008, the Government and the diagnostic imaging sector worked collaboratively to ensure that funding was sufficient to deliver quality services while also being sustainable for Government. Unfortunately, when the final MoU expired in June 2008, the then Minister for Health and Ageing did not reinstate indexation for diagnostic imaging services in line with other Medicare rebates. In contrast, even rebates for services such as acupuncture, contact lens attendances, optometrical services, allergy testing and sleep apnea investigation are indexed each year.

- *Funding is biased towards low cost providers and low value services*

  The bulk billing incentive introduced in November 2009, which provides an increased rebate of 10 per cent of the Medicare fee, is biased towards low cost providers which offer low clinical value services and bulk bill a higher portion of their services than quality comprehensive providers. In contrast, there is no incentive or additional funding for practices that invest in staff training, sub specialist expertise, regular communication with referrers and longer appointment slots. These are necessary for more clinically complex services which require higher levels of specialist medical and allied health professional input. The MSAC process is not keeping up with medical advances, and Australian patients are not able to access clinically recommended services

  The Medical Services Advisory Committee (MSAC) process to assess funding for new and existing medical procedures is expensive and time consuming. Many organisations struggle to find the resources necessary to successfully apply for new items on behalf of the patient groups they represent.

- *Medicare regulations are not assuring quality*

  Professional supervision rules, prohibited practices legislation and practice accreditation were introduced to protect patients. They mandate that appropriate standards are adhered to with respect to referral practices and examination standards. Unfortunately, these regulatory arrangements are difficult to enforce and some providers are exploiting the loopholes.

General X-ray

An x-ray image shows the internal structures of the body including the bones and some of the soft tissues. X-ray imaging still supports the quick and accurate diagnosis of many serious conditions including pneumonia, heart failure and lung cancer. Most commonly used for fractures and arthritic conditions, X-ray saves lives every day.

- *The MSAC process is not keeping up with medical advances, and Australian patients are not able to access clinically recommended services*

  The Medical Services Advisory Committee (MSAC) process to assess funding for new and existing medical procedures is expensive and time consuming. Many organisations struggle to find the resources necessary to successfully apply for new items on behalf of the patient groups they represent.

- *There are few standards for image storage and limited interconnectedness between provider IT systems to support streamlined access to patient images*

  Most diagnostic imaging providers have invested in IT solutions to share images and reports with their referrers, however storage and interoperability across the sector is inconsistent. The current e Health infrastructure is not integrated, so clinician access to stored images can be problematic and time consuming.

Impact of current arrangements

Access

Patient access to diagnostic imaging services is lagging behind the rest of the world. While we have enough CT machines to serve our population, the number of CT examinations per 1,000 people is only around 80 per cent of the OECD average. For MRI services, the shortfall is even greater, with Australians' access at around 55 per cent of the OECD average.

For example, Australian patients are experiencing delays in access to Medicare funded, clinically recommended services such as breast, prostate, pelvic and abdominal MRI, which in turn is delaying the diagnosis of cancers that would respond well to early treatment.

Patients are also less able to access affordable and convenient quality diagnostic imaging services, as providers withdraw unviable services. This problem is becoming more prevalent as the difference between Medicare rebates and the cost of services grows every year. Access Economics (2010) forecast that the average cost of delivering a quality diagnostic imaging service would be $162 in 2011-12, which was almost $40 more than the average Medicare rebate of $124. This shortfall will continue to grow while rebates are frozen and service costs increase. This shortfall will continue to grow while rebates are frozen and service costs increase.

Providers are also less likely to invest in the latest technology, particularly in the newer modalities, when the service or the business is financially marginal. This is limiting access to clinically necessary services, which puts patients at risk of missing opportunities for early diagnosis and treatment.

Affordability

While Government funding has remained constant, patients are paying higher and higher gaps. Patient gaps for diagnostic imaging services grew by 7.0 per cent in 2011-12 and 4.7 per cent in 2012-13, with patients paying around $475 million in gaps in 2012-13. The average gap payment in 2012-13 was $88.02, up from $61.09 in 2007-08. This means that the average gap has risen from 55 per cent of the average Medicare benefit to 70 per cent – the Government is paying less per service and the patient is paying more.

Affordability is often an issue for Australia's sickest patients because they tend to require the most clinically complex and resource intensive services. These services are poorly funded and therefore tend not to attract the bulk billing incentive, leaving the patient to pay an even higher gap. For example, diagnostic mammography services attract a non-bulked billed rebate of $45.90 for a service which requires 30 minutes of radiologist time during the examination. As a result, most private radiology practices either charge gaps of up to $100 for mammography services, or do not offer the service at all.

Ultrasound

Ultrasound uses high frequency sound waves to gather information about a variety of conditions, including pregnancy, gallstones and varicose veins. Ultrasound can be used to capture images of the pelvis and abdomen, the musculo-skeletal system, breast abnormalities, the male reproduction system, the kidney, the thyroid, the gall bladder and pancreas, fetal development and many other indications.

Quality

Specialist medical and allied health professional input is the major determinant of a quality diagnostic imaging service. Allied health professionals need to be very careful to keep the patient safe, and to ensure that the images they capture adequately show the pathology of the body part or system under investigation. The radiologist then needs to devote enough time to view a large number of images (often many hundreds), and to interpret them in the context of the patient's history and symptoms to prepare a diagnostic report. In many cases the radiologist is called upon by the referrer for further discussion to consider the best treatment plan for the patient. This work all takes time and is integral to delivering an effective medical service.

Faced with rebates being cut each year in real terms, and rising salaries and wages in particular, practices must choose between cutting costs or giving up on the bulk billing incentive and losing the volume necessary to be viable.

This is very challenging for providers year on year, and the impact on the quality of patient services is concerning. Faced with two equally undesirable options, practice managers often feel they are being forced to economise on their most significant cost – their specialist medical and allied health professional staff. For example, the time they can allocate to each service will sometimes be reduced or the training or qualifications of the staff involved in delivery of the service will be downgraded.

The opportunity for low cost providers that deliver low value services to compete for Medicare funded services is best illustrated by the expansion of X-Ray practices into Ultrasound and CT without a radiologist. These practices avoid the cost of an onsite radiologist, and send images to a remote radiologist for 'reading and reporting'. They then claim Medicare benefits for these services, including the bulk billing incentive for services they bulk bill, despite there being no medical supervision onsite to influence radiation dose and reduce inappropriate imaging.

Patients are at risk of not being able to access their images when they are needed in the future. When radiologists need access to previous images taken by providers for comparison purposes, practice staff need to manually find them, usually with a phone call to other providers. This is time consuming and unreliable. Even where the images are found, they are often stored in a different data format which needs to be converted causing delay and duplication. It can be life threatening in an emergency situation if images cannot be accessed and viewed quickly to allow swift diagnosis and treatment to commence.

Efficiency

Sector wide efficiency is particularly important in the current fiscal environment though it is very challenging to achieve. Services are provided by the public and private sectors and the practice models vary from X Ray only practices through to comprehensive tertiary centres.

To promote an efficient spread and utilisation of equipment it is important to recognize the role of each provider type within an efficient, Australia-wide network of diagnostic imaging providers, and to fund them appropriately.

Currently the level of fragmentation is too high for the sector to be efficient, and the bias in funding leads to a bias in resource allocation towards low cost providers of low clinical value services, as well as towards public hospitals that are desperate for additional Medicare funding. These two practice types are therefore the fastest growing practice types in Australia. Public hospital benefits grew by an average 9.3 per cent each year between 2005-06 and 2010-11, compared to 7.4 per cent for private providers. Meanwhile, the number of low cost practices grew by an average 5.1 per cent, compared to 1.2 per cent for comprehensive practices.

Positron Emission Tomography (PET)

Using radiation, a PET scan produces three-dimensional, colour images of the body. This is particularly important in fighting a range of cancers including lung, brain and skin. A PET scan allows doctors to accurately map and monitor a cancer's location and activity to ensure the best treatment.

Implications of where Australian diagnostic imaging is heading

Patients are missing out on early diagnosis and treatment

Too many patients are missing out on the full benefits of diagnostic imaging. By either delaying or foregoing examinations due to cost or inconvenience, they are missing the opportunity for early diagnosis and treatment. This leads to poorer health outcomes and higher out of pocket treatment costs as illness and conditions are more advanced by the time they are treated.

Public hospitals are not focused on inpatients

Public hospitals are overburdened by outpatients, and are losing focus on their core business of looking after inpatients who face increased wait times. ADIA is aware of inpatients at major metropolitan public hospitals waiting as long as nine weeks for an MRI, as these hospitals struggle to balance the needs of both inpatients and a growing number of outpatients. This situation is clearly not sustainable, and not fair on inpatients who need diagnosis and treatment as quickly as possible.

Patients are missing out on quality streamlined care from the outset

Fewer patients are accessing practices offering a broad range of radiology services with an attendant specialist radiologist and support from sub-specialists.

The sustainability of comprehensive private practices is at risk

All providers of diagnostic imaging rely upon minimum service volume to remain viable, particularly for modalities requiring high capital investment and significant specialist and technical input. With volumes shifting to low cost providers and public hospitals, the efficiency of higher cost, comprehensive private practices declines. This is making it very difficult for these practices, which provide more than 80 per cent of Medicare services and have around $3 billion invested, to continue to offer appropriate levels of professional input in services to their patients.

The Government and patients are paying more for poorer health outcomes

Although rebates for diagnostic imaging have been capped, the Government is paying more as a result of the current funding and policy settings. More imaging needs to be repeated due to poor quality imaging, inappropriate choice of imaging modality or poor access to prior images. Practice and equipment efficiency is sub optimal, particularly for quality comprehensive practices that charge patient gaps.

In the end, the Government misses out on the downstream cost savings to the health system which clinically appropriate diagnostic imaging can provide. Imaging enables many diseases and conditions to be detected at a treatable stage (for example, CT has provided invaluable new data which assists in the earlier detection and treatment of colon cancer). This allows for earlier and less intensive treatment. Diagnostic imaging also ensures that treatment is more accurate, increasing the effectiveness and reducing the duration of treatment. This is the standard of health care that Australians expect, and it can also generate significant savings for the broader Medicare and hospital budgets.

Magnetic Resonance Imaging (MRI)

Magnetic Resonance Imaging uses a very powerful magnet and radio-frequency pulses to collect signals that are then processed by a computer to form an image of the body part. MRI gives a detailed view of the soft tissues of the body, such as muscles, ligaments, brain tissue, discs and blood vessels. MRI uses no radiation, and there are no known harmful side effects.

Diagnostic Imaging performance metrics

Australia is not keeping up with the rest of the world in access to diagnostic imaging

	MRI units (per million population)	MRI exams (per 1,000 population)	CT units (per million population)	CT exams (per 1,000 population)
Australia	15.0	26.1	50.6	104.3
OECD average	31.5	48.3	40.9	128.2

Source: OECD Health Data 2013

Diagnostic imaging rebates have declined

Since patient rebates were frozen in 1998, the value of diagnostic imaging rebates has fallen:

Item	Description	1998 rebate*	2014 rebate*	Fall in real value
56301	CT – chest	$259.30	$250.75	35%
58103	X-Ray – spine	$50.15	$46.85	38%
63001	MRI – head	$424.60	$342.75	46%
55238	Ultrasound - vascular	$147.00	$144.10	35%

*Based on 85% of the Schedule fee

Rebates in Australia lag behind the rest of the world

Funding for Australian MRI services in 2009 was significantly less than the median fee of $646 for MRI in six OECD countries:

($US)	Australia*	Canada	France	Germany	Netherlands	UK	USA
MRI	$453	$824	$436	$839	$567	$179	$1,200

Source: International Federation of Health Plans, 2009 Comparative Price Report

*Average Medicare rebates in 2009-10, converted to $US, source: Department of Health and Ageing Medicare data

Fluoroscopy

Fluoroscopy enables radiologists to view X-rays in real time on a television monitor. In most cases this involves the administration of a 'contrast' agent to outline the region of interest. The two most common fluoroscopic procedures are barium meal and barium enema. A barium meal is an examination of the upper part of the gastrointestinal tract, including the oesophagus, stomach and duodenum. A barium enema is an investigation of the large bowel.

Patient gaps for diagnostic imaging services are growing

Patient gaps in all modalities except Nuclear Medicine are growing at a rate significantly higher than inflation:

Modality	Growth in average patient gaps (2010-11)	Growth in average patient gaps (2011-12)	Growth in average patient gaps (2012-13)	Average patient gap (2007-08)	Average patient gap (2012-13)	Growth (2007-08 to 2012-13)
Ultrasound	11.3%	4.4%	4.5%	$69.17	$94.01	35.9%
CT	7.8%	4.8%	2.7%	$102.19	$131.92	29.1%
X-Ray	8.5%	7.8%	4.1%	$33.80	$51.46	52.2%
NM	3.7%	-1.4%	1.9%	$93.79	$99.42	6.0%
MRI	5.5%	2.3%	7.7%	$126.17	$157.67	25.0%
Total	**9.8%**	**7.0%**	**4.7%**	**$61.09**	**$88.02**	**44.1%**

Source: Diagnostic Imaging Medicare Data provided by Department of Health

The Government's contribution to quality diagnostic imaging services is declining, while patient gaps are increasing

Services	Decline in real value of rebate from 1998 to 2014	Average increase in patient gaps from 2007-08 to 2012-13
CT – chest	35% ▼	29% ▲
X-Ray – spine	38% ▼	52% ▲
MRI – head	46% ▼	25% ▲
Ultrasound - vascular	35% ▼	36% ▲

Source: ADIA analysis of MBS; Diagnostic Imaging Medicare Data provided by Department of Health

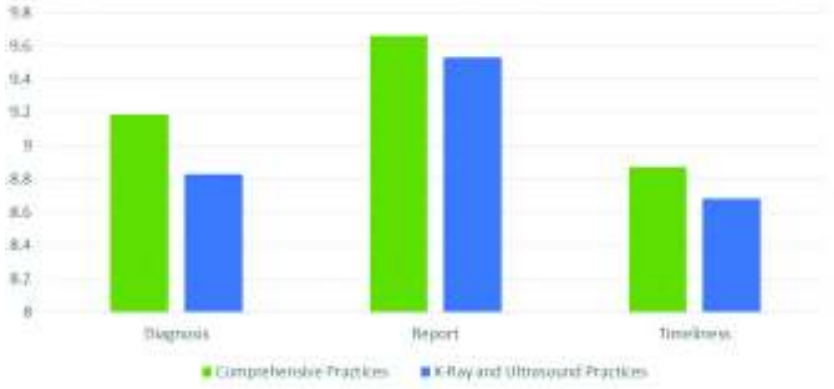
Mammography

A mammogram provides detailed images of the internal structure of the breast. Mammograms are used as a screening tool to detect early breast cancer in women without symptoms and to detect and diagnose breast disease in women experiencing symptoms such as a lump, pain or nipple discharge. Mammography plays a central part in early detection of breast cancers because it can show changes in the breast before a patient or doctor can feel them. Early diagnosis of breast cancer saves lives.

Comprehensive practices perform better than other imaging practices on quality measures

A survey of referrers undertaken by Press Ganey (2012) revealed the most important service attributes to referrers. For each of these factors, referrers stated that comprehensive practices recorded better results than other imaging practices:

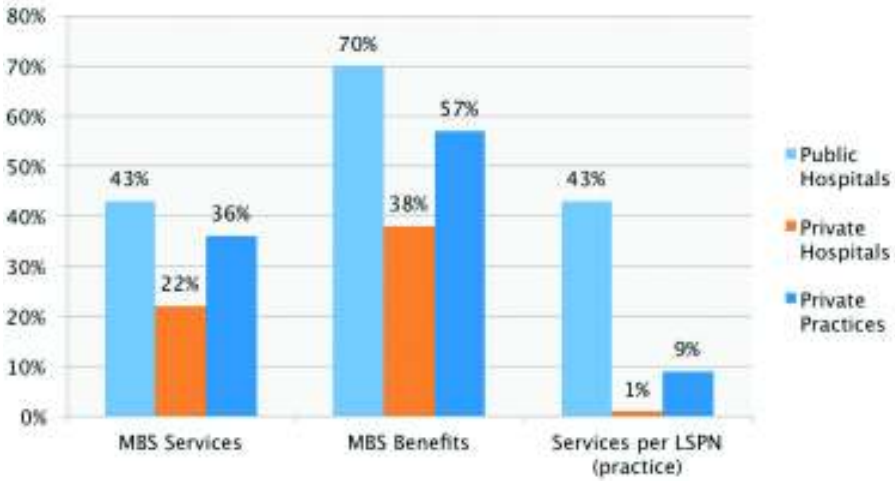
- for accuracy and detail of diagnosis, referrers rated comprehensive practices at 9.19 out of 10, compared to 8.83 for X-Ray and Ultrasound practices;
- for thoroughness of the report and recommendations, comprehensive practices were rated 9.66, compared to 9.53 for X-Ray and Ultrasound practices; and
- for accomodating urgent appointments, comprehensive practices were rated 8.87, compared to 8.68 for X-Ray and Ultrasound practices.



Of the factors identified as contributing to quality and access, comprehensive practices scored lower in only four, including for bulk billing all patients, and for bulk billing on request.

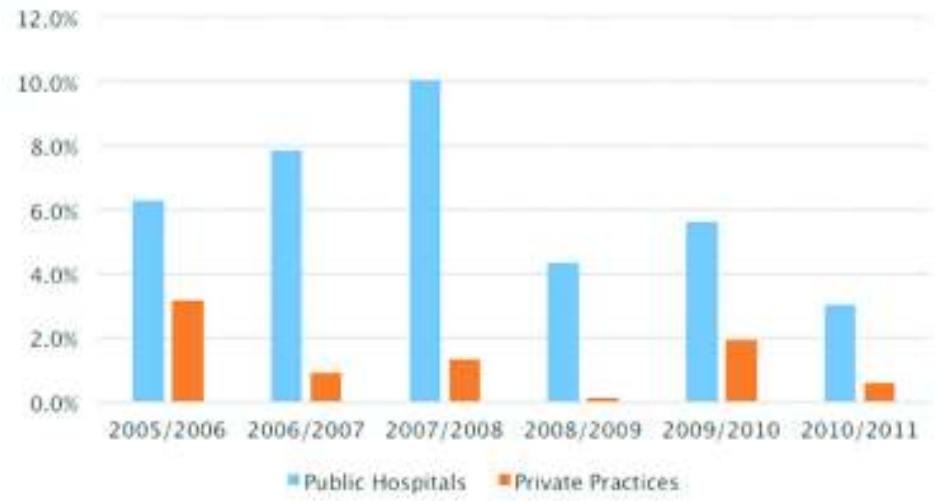
Public hospitals are the fastest growing diagnostic imaging provider type

Public hospital benefits (for both inpatients and outpatients) grew by an average 9.3 per year between 2004-05 and 2010-11, around 2 per cent more than private practices and private hospitals. Public hospitals also grew at a significantly higher rate when measured by services and services per practice over the same period:



Source: ADIA analysis of Diagnostic Imaging Medicare Data provided by Department of Health

Services per LPSN (practice) have grown at an average 6.2 per cent over six years, compared to 1.3 per cent for private practices:



Source: ADIA analysis of Diagnostic Imaging Medicare Data provided by Department of Health

ADIA analysis shows that large states with relatively low public hospital shares of the diagnostic imaging market have high public hospital growth rates, leaving scope for significant further public hospital growth in these states:

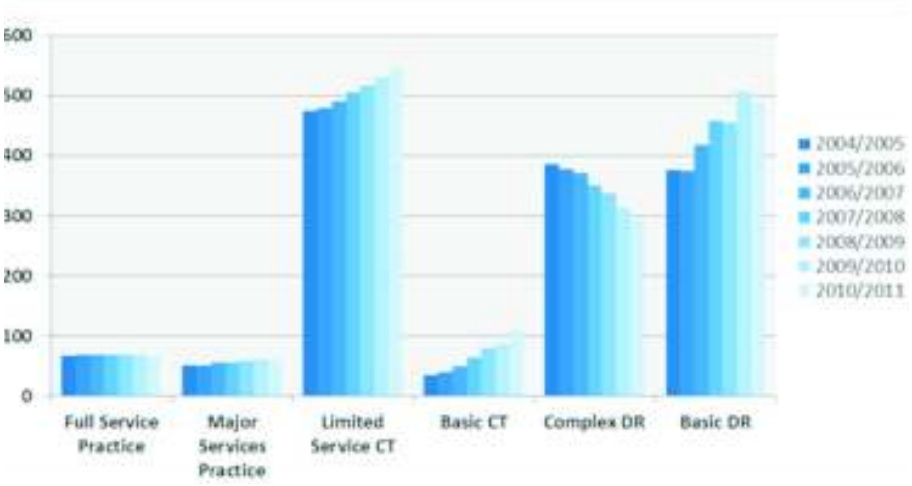
*Tasmania and NT not included in analysis; radius of circle is the population of that state

Multi Slice CT Scan

While based on X-Rays, CT scans provide greater information – detecting early cancers, fine fractures that are hard to see on X-Rays, and spinal cord damage etc. CT scans also provide the best and quickest way to scan large parts of the body, and assist with the accurate placement of needles for biopsies and therapeutic treatment.

Low cost providers of low value services are the fastest growing practice type

The number of Basic Service practices increased from 42 to 137 between 2004-05 and 2010-11, and Limited Service practices increased from 488 to 576 over the same period. In contrast, the number of Full Service and Major Services practices increased by nine.



Source: ADIA analysis of Diagnostic Imaging Medicare Data provided by Department of Health

The number of metropolitan practices unattended by a radiologist is growing

ADIA estimates that at least 80 practices in metropolitan areas are delivering CT services without radiologist attendance, with this number growing by around 15 each year.

ADIA analysis of Department of Health Location Specific Practice Number data shows that there are at least 164 metropolitan radiology providers delivering X Ray and Ultrasound, and 506 metropolitan radiology providers delivering X-Ray only. These are the providers most likely to expand into CT.

The bulk billing incentive creates a funding bias towards low cost providers

The Government pays less for a service involving high levels of clinical input in a comprehensive supervised practice than it does for the same item in a low cost practice which bulk bills. For example:

Item	Bulk billed rebate	Non-Bulk billed rebate
56001 – CT of brain	$185.30*	$165.80**

*95% of Schedule fee; **85% of Schedule fee

Biopsy and therapeutic guidance

Medical imaging is used for accurate needle placement for injection of anti-inflammatory into the spine and other joints. CT is used to guide drainage tubes placed into an abscess non-surgically.

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