

DIAGNOSTIC IMAGING

2018

This document outlines the AMA position on diagnostic imaging.

1. Overarching principles

- 1.1. Diagnostic imaging services should reflect best clinical practice; be performed by qualified practitioners; and be provided in facilities that meet accreditation standards.
- 1.2. The funding and regulation of diagnostic imaging services should support patients to receive timely and affordable services that are clinically appropriate, safe, and effective.
- 1.3. Therefore, government policies, regulations, and funding arrangements for diagnostic imaging services should:
 - (a) place primary importance on safety, quality, access, and affordability;
 - (b) facilitate patient care and convenience, including in regional and rural areas;
 - (c) be based on evidence of enhanced management of patients and improved patient outcomes;
 - (d) support sustainability of the diagnostic imaging sector, including the sector's ability to provide ongoing training, research and development;
 - (e) recognise the savings to the health care system and the general economy from early diagnosis and intervention and monitoring of chronic disease which are facilitated through diagnostic imaging services; and
 - (f) appropriately reimburse the patient for the cost of being provided diagnostic imaging services.
- 1.4. Governments must continue to engage with medical practitioners involved in diagnostic imaging services to ensure that its regulatory framework is fit for purpose and keeps pace with evolving clinical practice and the health care system generally.

2. Context

- 2.1. The AMA membership includes diverse interests in diagnostic imaging. AMA members are providers of diagnostic imaging services, requesters of diagnostic imaging services, and may be owners of diagnostic imaging practices.
- 2.2. Diagnostic services are provided by a range of medical practitioners. Radiologists working in specialist diagnostic imaging practices and hospital settings receive requests from referring medical practitioners. Diagnostic imaging services are also provided directly to patients by treating doctors, such as obstetricians and gynaecologists, cardiologists, urologists, sports medicine specialists, intensive care unit specialists, and others.
- 2.3. As well as directly providing imaging services, diagnostic imaging practices in both the public and private sectors play an essential role in the teaching of, and research into, the medical care of patients.
- 2.4. Private diagnostic imaging services are currently reimbursed under a fee-for-service model. The costs are generally shared between governments, third party insurers, and patients.

- 2.5. A large majority of diagnostic services are bulk-billed, but a widening gap between the Medicare benefits and the real cost of providing services is increasingly leaving patients with out-of-pocket costs.

3. Role of diagnostic imaging

- 3.1. Diagnostic imaging plays a critical role in a world-class, 21st century health system. Diagnostic imaging is used:
- (a) for diagnosis and screening;
 - (b) to formulate treatment plans and monitor responses to treatments;
 - (c) to perform minimally invasive procedures; and
 - (d) as part of interventional procedures.
- 3.2. Investment in high quality diagnostic imaging services that reflect best clinical practice ultimately saves taxpayers from much higher downstream costs in the acute care sector, and can greatly improve patients' experiences and outcomes.

4. Quality and safety

Evidence-based diagnostic imaging services

- 4.1. The AMA supports ongoing research to continually improve the knowledge base underpinning best practice diagnostic imaging practices by requesters and providers. Best practice diagnostic imaging is safe, effective, cost-effective, and high quality.
- 4.2. The AMA supports the role of the Royal Australian and New Zealand College of Radiologists (RANZCR) and NPS MedicineWise in providing evidence-based advice and guidance to health professionals and patients on the safe, cost-effective, and quality use of diagnostic imaging.
- 4.3. The AMA supports the *Choosing Wisely* initiative of NPS MedicineWise, which aims to improve the quality of health care by eliminating unnecessary and sometimes harmful tests, treatments, and procedures.
- 4.4. The AMA also supports tools, such as the *Diagnostic Imaging Pathways* endorsed by RANZCR, which facilitate evidence-based requests for specific indications to ensure the right study with the appropriate sequences is performed.

Practice accreditation

- 4.5. The AMA supports a model of quality assurance through industry self-regulation, with appropriate links to a regulation framework.
- 4.6. The AMA therefore supports the *Diagnostic Imaging Accreditation Scheme*, which requires providers, practices, and sites offering diagnostic imaging services to meet certain standards of safety and quality in order for patient services to be eligible for Medicare benefits. It ensures practices perform services consistent with industry agreed standards, regardless of where and by whom a service is provided.
- 4.7. Quality assurance standards must be regularly reviewed and continue to evolve to keep pace with changes and innovations so that services remain safe, effective and cost effective.

Practitioner qualifications

- 4.8. All medical practitioners and other health professionals providing diagnostic imaging services:

- (a) must be appropriately trained, qualified, and credentialed;
- (b) have the knowledge and experience to provide quality outcomes for patients; and
- (c) meet continuing education requirements that are commensurate with the level of the services they provide.

Radiologist supervision of services in radiology practices

- 4.9. Radiologists supervise support staff such as sonographers, radiographers, and nurses to ensure quality and accuracy, and to guide clinical care and best outcomes for patients. This leadership role directly impacts upon and improves patient care.
- 4.10. Diagnostic imaging services in radiology practices should therefore be supervised by radiologists. In certain circumstances and for certain services, quality medical imaging services require supervision by an on-site radiologist. The circumstances, level, and manner of radiologist supervision should be in accordance with accepted medical practice.
- 4.11. Radiologists operate in a diverse range of imaging environments, each with their own risks, which should be appropriately managed. Radiologists should have the flexibility to implement efficient and effective processes, consistent with accepted medical practice, to ensure the quality and safety of diagnostic imaging services.

Radiation risk

- 4.12. The AMA supports minimising radiation dose for patients and the broader community. Medical imaging is a significant additional contributor to radiation exposure to individuals. Radiologists are the most appropriate medical practitioners to make judgements about the best diagnostic imaging modality and radiation dose for a specific patient.

Delegation to radiographers

- 4.13. Radiographers do not have the training or expertise to comment on and interpret imaging studies because this requires medical training. Delegating radiology reports to radiographers is a serious risk to patient safety.
- 4.14. Only medical practitioners are qualified to correctly interpret images. In a radiology practice, clinical radiologists integrate knowledge of clinical medicines, disease processes, imaging procedures, and radiological expertise with the individual condition of the patient to provide a specialist opinion.
- 4.15. A contemporary, patient-centred radiology practice requires leadership by a clinical radiologist working with other health practitioners, including radiographers. The radiologist is responsible for all components of medical imaging, and assumes medical and legal responsibility during care of their patients.

Comprehensive diagnostic imaging practices

- 4.16. The AMA recognises the benefits to patients from comprehensive diagnostic imaging practices that offer a range of imaging modalities – at a minimum X-ray, ultrasound, and CT services.
- 4.17. Medical imaging has advanced beyond diagnosis and into medical assessment and treatment, and non-surgical interventional procedures; patients can therefore benefit from being able to access these advanced services.
- 4.18. In addition, when a practice includes a range of imaging modalities, a radiologist is able to provide an alternative service when he/she receives a request that may not be the right test for the patient's clinical indication.

Quality of care in rural, remote, and regional Australia

- 4.19. The quality of imaging services should not be compromised because people are living in rural, remote, or regional communities.
- 4.20. Regulations and quality standards should support the provision of services consistent with accepted clinical practice.

Workforce, training, and education

- 4.21. There should be appropriate levels of training in diagnostic imaging embedded into the curriculum of doctors in training and speciality medical officer training.
- 4.22. Funding for radiologist training must be sufficient to meet current and future workforce needs in the public and private sectors.
- 4.23. Government funding for diagnostic imaging services must recognise the role of public and private practices in teaching and research.

Referrals to radiologists

- 4.24. Radiologists and other doctors work in collaboration to achieve the best outcome for their patients.
- 4.25. It is essential that referring doctors provide clinically relevant information for imaging specialists to provide the most clinically appropriate and cost effective service.

Point of care testing

- 4.26. AMA supports point of care diagnostic imaging services provided by appropriately credentialled medical practitioners as part of their practice and which are clinically appropriate and consistent with best practice guidelines. This allows patients to receive timely, convenient, comprehensive, and integrated health care.

Electronic health records

- 4.27. The AMA supports the development and use of shared electronic health records by medical practitioners to improve the safety and quality of medical care in Australia. A shared electronic medical record that links reliable and relevant medical information across health care settings will help provide treating doctors with the information required to make the best clinical decisions.
- 4.28. The AMA therefore supports the inclusion of diagnostic imaging reports in My Health Record so that they are available for health care providers and patients in a way that:
 - (a) enhances clinical management and care;
 - (b) reduces time wasted by health practitioners; and
 - (c) avoids unnecessary repeat examinations.
- 4.29. It is important that software linking diagnostic imaging services to other medical practices is interoperable so that radiologists can communicate results quickly, effectively, and equitably to the requesting and treating doctors.
- 4.30. Requesting and treating doctors must be able to view images when required, in an appropriate format, including in the operating theatre. Images must be retained in line with accepted best clinical practice.

- 4.31. Medical practitioners must be consulted in the ongoing development and implementation of electronic health records.

5. Diagnostic imaging funding principles

- 5.1. The AMA supports a fee for service model.
- 5.2. Fee for service should cover the provision of individual patient diagnostic imaging services, but also related quality activities – for example, participation in patient-centred multi-disciplinary team meetings.
- 5.3. Fee for service arrangements provide the best balance of incentives to encourage and facilitate an efficient, competitive market of high quality diagnostic imaging providers to respond to local demand in most areas of Australia.
- 5.4. The arrangements allow providers to cross-subsidise between services so that the true cost of very complex and costly services that are not performed very often is not passed directly onto those patients using those services. Providers are able, to some degree, to offset these more expensive, less frequent imaging services with lower cost, but higher volume services. This allows providers to offer a wider range of diagnostic imaging services in a local area.
- 5.5. The AMA opposes funding arrangements that:
- (a) cap expenditure;
 - (b) restrict access;
 - (c) limit the number of eligible providers; and
 - (d) limit the number of eligible machines.

6. Access and affordability

- 6.1. Government funding arrangements should support clinically appropriate access to the right diagnostic service at the right time; access to diagnostic imaging services should be based on clinical need.
- 6.2. Diagnostic services should be eligible for Medicare benefits as long as they: reflect evidence-based clinical practise; are performed by qualified practitioners with appropriate training, knowledge, and expertise; are provided in facilities that meet accreditation standards; and are undertaken using high quality equipment.
- 6.3. Funding arrangements must also be agile enough to keep up with and subsidise contemporary, evidence-based, and medically accepted clinical practice and new technologies that represent an improvement in care.
- 6.4. Funding arrangements designed only to reduce government outlays risk compromising access for treating doctors and patients, and costing the health system more in the longer term.

Affordability

- 6.5. Diagnostic services must be appropriately reimbursed to ensure they remain affordable for patients.
- 6.6. Access to diagnostic imaging services for many people is based on affordability. Increasing out-of-pocket costs impacts most on the sickest and most vulnerable individuals in the community – for example, the elderly, the chronically ill, the unemployed, and Indigenous peoples¹. When services become unaffordable, a proportion of patients won't access services when they need them². This is especially exacerbated in some regions where patients do not

have the safety net of attending a public hospital service. Poorly managed conditions and/or treating late stage disease leads to increased downstream costs for the health system.

- 6.7. Government rebates for diagnostic imaging services therefore need to be continually aligned with the cost of service provision and set at a level that ensures less well-off patients and those in areas of social disadvantage remain able to access the mainstream health system.

Patient payment model

- 6.8. The AMA supports the introduction of a Medicare payments model that protects patients from needing to pay the total cost up front to access diagnostic imaging services that cannot be bulk-billed. This should be available for other out-of-pocket MBS rebate eligible services but is a particular issue for diagnostic imaging given the high cost of some individual services.

Rural, remote, and regional services funding

- 6.9. Access to timely and high quality diagnostic imaging services should not be compromised because someone lives in a rural, remote, or regional area.
- 6.10. Government funding arrangements should recognise the clinical and ethical importance of access to local services, and that local services may need additional funding to be viable.
- 6.11. Australians living in rural, remote, and regional areas should have access to practices that can afford to offer comprehensive services; attract and retain competent medical staff with general and specialist expertise; and to purchase, operate, and maintain appropriate equipment.
- 6.12. Additional government funding support is necessary for these services, either in the form of special grants or additional loadings.
- 6.13. If appropriate services are not locally available, patients should be supported to travel to receive timely imaging in a way that recognises costs of travel, accommodation, and the impact on family and work. Additional subsidies should also be available for rural/remote patients needing to access private practices when there is no practical or timely access to public providers.

Funding to support quality

- 6.14. Government policies and funding must support the ongoing viability and sustainability of the diagnostic imaging sector.
- 6.15. A reduction in the number of providers, and quality or range of services offered will impact on access and affordability for patients.
- 6.16. When the difference between the actual costs of providing services and Medicare rebates becomes too great, the investment in experienced, highly trained staff and high quality equipment is compromised and/or the comprehensiveness of services offered is reduced.
- 6.17. Practice costs are primarily driven by the labour costs of highly trained staff including medical specialists to examine and analyse the results, radiologists, radiographers, sonographers, and so on.
- 6.18. Inadequate government funding means practices may not offer high gap or unprofitable services. Private diagnostic imaging practices rely on MBS rebates for a considerable proportion of their revenue given that the ability to recover an increasing proportion of revenue from patients is limited.

- 6.19. Funding arrangements must also recognise compliance with accreditation arrangements results in administrative and financial costs to imaging providers, and these costs are reasonably partly attributed to any capital component within the MBS Scheduled Fee.

Funding for value-add collaboration between medical practitioners

- 6.20. Radiologists maintain long-standing relationships with colleagues and with treating doctors to ensure high quality medical care is provided to patients informed by expert medical opinion.
- 6.21. The Medicare Benefits Schedule should cover formal second opinions and comparison reporting in complex cases.
- 6.22. The Medicare Benefits Schedule should also recognise professional engagement between radiologists and treating medical practitioners.
- 6.23. Doctor to doctor consultations are a key indicator of quality practice. Radiologists and treating doctors regularly confer on the interpretation of results of diagnostic tests requested by the treating doctor. This interaction ensures optimal patient care and facilitates quality diagnostic referrals. Patients benefit directly through improved appropriateness of imaging and more accurate reports.

Funding for clinically appropriate imaging

- 6.24. Government funding and regulatory arrangements should encourage the direction of patients to the most appropriate imaging modality. Regulation should not be a barrier to better outcomes for patients.
- 6.25. The AMA supports radiologists being able to make decisions over-riding a referring doctor request by substituting it with a more clinically appropriate service that leads to a more effective diagnosis of the patient's condition. Radiologists are experts in determining the most appropriate imaging study for a particular clinical presentation, and this should be fully utilised to ensure patients are receiving only appropriate imaging.
- 6.26. Radiologists should take reasonable steps to discuss changes to the diagnostic services requested with a patient's referring doctor. If this is not possible or practicable, the radiologist should advise the referring doctor following the provision of alternative services.

Funding for radiologist referrals

- 6.27. Government funding should provide radiologists with the capacity to proceed with additional diagnostic scans and/or to refer a patient directly to another medical practitioner – in consultation with the patient's initial referring doctor. This is especially important for rural patients needing to travel for diagnoses and treatment.
- 6.28. This would enhance management of patients moving through a complex diagnostic and treatment pathway by reducing the number of times a patient needs to return to their initial doctor for multiple referrals. It would substantially reduce the expense and disruption for patients, as well as reduce Medicare costs by skipping unnecessary services, while improving patient outcomes through higher compliance.

Diagnostic imaging requests

- 6.29. The AMA supports the right of patients to participate in the choice of their diagnostic imaging provider in the majority of cases.

- 6.30. There are situations where a treating medical practitioner requires, for valid clinical or practical reasons, that a specific diagnostic imaging provider performs a test. For example, the treating practitioner may need to specify a specific diagnostic imaging service to undertake a particular test due to:
- (a) the particular expertise of a specific provider;
 - (b) confidence in the quality of the service;
 - (c) knowledge that a specific test can be done by a specific provider, or that they are the only provider of that service in the area; and/or
 - (d) the provider maintaining the test result history for the patient.
- 6.31. Ideally, patients should therefore discuss their choice of diagnostic imaging provider with their treating doctor.
- 6.32. The Medicare Benefits arrangements should always provide for a treating practitioner to be able to make a request to a specific provider if clinically necessary.

Referring by non-medical health practitioners

- 6.33. The AMA does not support extending Medicare benefits to diagnostic imaging services requested by non-medical health practitioners unless under the supervision of, or within a collaborative arrangement with, a medical practitioner. Non-medical health practitioners do not have the medical training to make judgements independently about whether a diagnostic imaging service is required, or which is the most appropriate service. Extending Medicare benefits is likely to simply increase costs with more, unnecessary tests requested.

Funding for capital costs

- 6.34. Funding arrangements must also recognise and support the significant capital costs incurred by providers. The funding environment should encourage new entrants to the market who can be deterred by high cost of equipment and other set-up requirements.
- 6.35. Changes in capital funding arrangements may impact on the rate at which new machines replace older machines, whether costs of more expensive modern machines used less frequently are cross-subsidised by cheaper, older machines used more frequently, whether investment in better machines providing higher quality images is cost-effective, and may also impact on seller behaviour.

Differential rebates based on equipment age

- 6.36. The AMA opposes different MBS fees/rebates applied under Medicare, known as the Capital Sensitivity Rules, on the basis of equipment age because of the potential perverse incentives it encourages.
- 6.37. For example, too short a depreciation period might disadvantage a diagnostic imaging provider who invests in a top-of-the-line machine that can produce good quality images for a long period with periodic upgrades, and instead encourages a provider to purchase a cheaper quality machine that produces poorer quality images but that can be replaced more often.

Same fee for same service

- 6.38. The AMA considers that the MBS Schedule Fee should be the same for the same diagnostic imaging service, irrespective of whether it is provided by a diagnostic imaging practice or provided by a treating doctor.

Alternative funding models

- 6.39. The AMA opposes any splitting of fees between image capture and medical reporting.
- 6.40. The AMA opposes any introduction of performance-based incentive payments with the objective of creating a quicker turn-around. The current fee for service arrangements already encourage maximising throughput.
- 6.41. The AMA opposes any introduction of performance benchmarks that create caps, limitations or restrictions – for example, no more than 5 per cent of recalls for further testing.

Commonwealth issued licences for diagnostic imaging equipment

- 6.42. The AMA opposes government licencing of diagnostic imaging equipment, which results in restricted access to Medicare rebates: it is a blunt tool to restrict patients' access to appropriate health care and thereby reduce government outlays.
- 6.43. Patient access to diagnostic imaging examinations should be based on clinical need and evidence-based clinical guidelines, not on geographic availability or other arbitrary factors used by governments to determine the number and locations of machines.
- 6.44. The AMA therefore does not support the current government licensing of Magnetic Resonance Imaging (MRI) equipment. MRI services based on evidence-based practice are cost effective, as well as improving patient care and minimising unnecessary exposure to radiation.
- 6.45. All MRI machines that meet standards set by RANZCR, and are staffed by radiologists and radiographers that meet the RANZCR's MRI accreditation standards, should be eligible for Medicare rebates.

See also:

AMA Position Statement on Medical Workforce and Training - 2013
AMA Position Statement on Prevocational Medical Education and Training - revised 2017
AMA Position Statement on Shared Electronic Medical Records – revised 2016

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1. There is a large body of Australian and international research illustrating the negative impact of out-of-pocket costs/copayments on people seeking timely health care, particularly those in low socioeconomic groups. The following Australian article summarises the key evidence and provides additional references: Duckett S, Breadon P, Farmer J, 2014, *Out of pocket costs: Hitting the most vulnerable hardest*, Grattan Institute

2. The regular ABS Patient experience survey shows that a significant proportion of people who need to see a medical specialist delay or do not go because of cost, and the likelihood increases if they live in an area of socio-economic disadvantage. See: <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4839.0>