MBS Review Advisory Committee

Vascular Interventional Radiology Working Group

Draft report

September 2025

Contents

Summary

The Medicare Benefits Schedule (MBS) Taskforce reviewed 290 vascular T8 surgical items, vascular-related digital subtraction angiography (DSA) items and diagnostic imaging items related to vascular care. After the Taskforce's report was published in 2020, further input was provided by the Royal Australian and New Zealand College of Radiologists (RANZCR), the Interventional Radiology Society of Australasia (IRSA), the Australian and New Zealand Society of Neuroradiology (ANZSNR), and the Australian and New Zealand Society of Vascular Surgery (ANZSVS).

This resulted in 3 key recommendations from the Taskforce:

- Develop a distinct place for endovascular/interventional radiology items on the MBS
- Where there is an endovascular approach equivalent to an existing open vascular surgical T8 item, amend the open approach item descriptor to allow the endovascular approach (when appropriate)
- Develop a single diagnostic DSA item for the MBS.

Vascular Interventional Radiology Working Group

In April 2022, the then Department of Health and Aged Care nominated and requested a review by the MRAC of vascular interventional radiology (VIR) services. This work would review and expand on the Taskforce's report. The Department sought MRACs advice on several issues. The Vascular Interventional Radiology Working Group (VIRWG) was established as a subgroup of the MRAC to advise MRAC on this topic. The VIRWG comprises 4 MRAC members, including in the roles of Chair and consumer representative, as well as expert clinical representatives from several peak bodies.

Principles and issues

The VIRWG's deliberations and recommendations were premised on the following issues and basic principles:

- vascular and interventional radiology (IR) and interventional neuroradiology (INR) care exist within a rapidly evolving clinical and technological landscape
- Medicare expenditure is potentially limited
- there is a potential for reform of MBS items for diagnostic angiography, including diagnostic-only angiography and bundling with procedural services
- there should be an intention to treat when undertaking invasive diagnostic imaging
- a reconsideration of the role of aftercare is required.

The VIRWG considers that significant improvements in service effectiveness will be achieved by reforming the current set of diagnostic angiography items and the bundling of diagnostic angiography and fluoroscopy with a range of vascular and IR procedural services. The proposed reforms are in line with the Taskforce's recommendations 6 and 7 and have received strong support from the VIRWG. The VIRWG acknowledges that there are financial and access risks associated with its recommendations.

Recommendations

The VIRWG made 20 recommendations around the following categories:

- MBS interventional radiology diagnostic items and bundled services
- the role of aftercare
- intention to treat
- open, endovascular and hybrid approaches to treatment
- complexity modifiers
- clarifying MBS categories and terminology
- adding devices to the Prescribed List
- promoting specialist IR/INR practitioners' access to MBS specialist consultation items and self-determining the need for diagnostic imaging when managing patients for interventional procedures
- other recommendations.

New and amended MBS items

The VIRWG considered new and amended MBS items through a PICO analysis. The VIRWG contributed 75 PICOs addressing a wide range of vascular IR/INR and surgical services. An additional PICO was received in early 2025 as a referral from the Medicare Services Advisory Committee (MSAC) Secretariat.

The PICOs are categorised as follows:

1. diagnostic-only angiography/fluoroscopy
2. aneurysm repair
3. occlusion
4. thrombosis
5. arteriovenous AVF/ malformation repair
6. dialysis access
7. embolisation
8. ablation
9. miscellaneous vascular
10. INR intervention
11. IR (endovascular)
12. percutaneous repair (non-vascular).

Recommendations

Recommendation 1

Simplify and modernise diagnostic-only angiography services and reduce the current set of items for diagnostic angiography to two items.

Recommendation 2

Neuroradiology diagnostic-only services (for head, neck and spine) to remain separate services and will not be covered under the revised structure proposed for diagnostic angiography items.

Recommendation 3

Ensure that procedures that sit outside of the vascular/IR/INR section of the MBS do not lose access to angiography and fluoroscopy services that are clinically necessary.

Recommendation 4

Where possible, combine angiography and fluoroscopy with vascular procedures.

Recommendation 5

Remove aftercare restrictions from all in-scope vascular and interventional radiology items.

Recommendation 6

Medical practitioners undertaking invasive diagnostic services must always do so with the intention of treating the patient.

Recommendation 7

Existing MBS items for open vascular procedures must be amended to also include endovascular and hybrid approaches, where it is clinically appropriate.

Recommendation 8

Ensure that the same MBS fees are paid for open surgical and endovascular treatment approaches, where this is appropriate and reasonable.

Recommendation 9

Where an endovascular equivalent to an open surgical procedure does not exist, there will be no change.

Recommendation 10

Development of generic complexity modifiers based on a percentage of the recommended item fee. For procedures with additional clinical components, compared to what is expected of a standard procedure.

Recommendation 11

Change the title of MBS vascular Subgroup 3 to include interventional radiology or create a new interventional radiology subgroup.

Recommendation 12

Amend the title of Category T8 – Surgical Operations, Subgroup 3 – Vascular, Subheading 12 – Endovascular Interventional Procedures to reflect the procedures included under Subheading 12 accurately.

Recommendation 13

Restrict the new MBS items for diagnostic radiography to Subgroup T8.

Recommendation 14

Ensure that the terms used in MBS item descriptors and explanatory notes to describe clinical procedures are the same as the terms that are used in medical practice.

Recommendation 15

Amend current private health insurance membership rules to extend eligibility for vascular services to patients with a Bronze memberships.

Recommendation 16

Improve the procedure for adding new devices to the Prescribed List of Medical Devices and Human Tissue Products.

Recommendation 17

Amend MBS items 104 and 105 to include specialist Interventional Radiologists and Interventional Neuroradiologists as eligible practitioners.

Recommendation 18

Remove restrictions that prevent specialist Interventional Radiologists and Interventional Neuroradiologists from self-determining the need for diagnostic tests.

Recommendation 19

Introduce appropriate theatre banding levels for IR/INR specialists.

Recommendation 20

Develop a program of pre-surgery exercises that are eligible for MBS rebates.

Acronyms

ANZSNR	Australian and New Zealand Society of Neuroradiology
ANZSVS	Australian and New Zealand Society of Vascular Surgery
DSA	digital subtraction angiography
INR	interventional neuroradiology
IR	interventional radiology
IRSA	Interventional Radiology Society of Australasia
MBS	Medicare Benefits Schedule
PICO	Population, Intervention, Comparator, Outcomes
PL	Prescribed List of Medical Devices and Human Tissue Products
RANZCR	Royal Australian and New Zealand College of Radiologists
VIR	vascular interventional radiology
VIRWG	Vascular Interventional Radiology Working Group

Summary of the Taskforce's report

The MBS Taskforce reviewed 290 vascular T8 surgical items, vascular-related digital subtraction angiography (DSA) items and diagnostic imaging items related to vascular care. The Vascular Clinical Committee review of Vascular Services identified a significant gap related to vascular interventional radiology (VIR) services on the MBS but, due to time constraints, they were unable to review and provide recommendations on new or amended VIR procedures, particularly those that are not routinely performed by vascular surgeons. In many cases, VIR and IR procedures are already occurring with no current MBS rebate that reflects the procedure accurately in terms of time or complexity. Currently, these services may be claimed under existing items with broader descriptors.

After the Taskforce's report[1] was published, further input was provided by the Royal Australian and New Zealand College of Radiologists (RANZCR), the Interventional Radiology Society of Australasia (IRSA), the Australian and New Zealand Society of Neuroradiology (ANZSNR), and the Australian and New Zealand Society of Vascular Surgery (ANZSVS).

The additional input focused on two of the Taskforce's recommendations as follows:

1. Concerns raised by all relevant peak organisations that the recommendation for a single, low-fee diagnostic angiography-only item, would not allow for variations in time and complexity, and would therefore be unworkable in practice
2. Noting the significant gap identified by the Taskforce regarding vascular related interventional radiology procedures, the RANZCR and ANZSNR proposed new and amended IR and INR items (both procedural and diagnostic) for procedures that are not currently listed on the MBS.

In response to this input the Department undertook preliminary discussions with the relevant groups, as to their interest in addressing these outstanding items via the MRAC process.

Key recommendations from the Taskforce

Develop a distinct place for endovascular/interventional radiology items on the MBS

1. The Taskforce recommended that the vascular T8 section be renamed to 'Vascular, Endovascular and Interventional Radiology'

and

2. An alternative option to the Taskforce recommendation to rename the vascular T8 section is to create a new stand-alone interventional neuroradiology (INR) section of the MBS. Creating a distinct section will properly reflect the growing number of interventional services provided, many of which are mainly performed by interventional radiologists.
3. The Taskforce also recommended that INR items be aligned with the neurosurgery section of the MBS.

Where there is an endovascular approach equivalent to an existing open vascular surgical T8 item, amend the open approach item descriptor to allow the endovascular approach (when appropriate)

Noting when there is a substantial difference in time and/or complexity of an endovascular procedure vs the equivalent open procedure setting the same fee for both approaches may not be reflective of the competing inputs.

The MBS Review Taskforce recommended a single diagnostic DSA item for the MBS

However:

- RANZCR has proposed new diagnostic items for IR and INR
- advice provided by the VIRWG on the addition of diagnostic items will need to be considered along with existing vascular services diagnostic services.

Vascular Interventional Radiology Working Group

In April 2022, the then Department of Health and Aged Care nominated and requested a review by the MRAC of VIR services. This work would review and expand on the Taskforce's report.

The Department sought MRAC's advice on the following issues:

1. The creation of a new, stand-alone section of the MBS Category 3, Subcategory T8 – Surgical Operations - for vascular-related IR procedures or renaming of the vascular T8 section to 'Vascular, Endovascular and Interventional Radiology'.
2. The creation of new MBS items for IR/INR procedural and diagnostic services as proposed by RANZCR and ANZSNR, noting that
    - while RANZCR supported the range of INR procedures proposed by ANZSNR, it also provided a list of completely new MBS items distinct from ANZSNR's set of proposed new and amended items; and
    - should the inclusion of existing diagnostic angiography fees for specific anatomical sites (corresponding with the procedural site) be included or considered an acceptable guide with respect to the proposed IR/INR bundled procedural items?
3. The extent to which there is support for the Taskforce recommendation to align the proposed INR items with the neurosurgery items, noting that INR procedures are also undertaken by neurosurgeons and neurologists.
4. Where possible, amend existing vascular open surgical approach items to include endovascular or hybrid repair (e.g. by any approach) or create new items.

The VIRWG notes that in some cases this is very complicated and acknowledges the potential for 'cross-over' in with other sectors of the MBS, such as the cardiothoracic, orthopaedic and plastics items, which may warrant further consideration or more precise stipulations in the relevant descriptors or the related explanatory notes. Consultation input from the relevant peak organisations will be critical to harmonising any cross-over between subgroups within the T8 – Surgical Operations sections of the schedule.

The Vascular Interventional Radiology Working Group (VIRWG) was established as a subgroup of the MRAC to advise MRAC on this topic. The VIRWG comprises 4 MRAC

members, including in the roles of Chair and consumer representative, as well as representatives of the following peak bodies:

- ANZSNR
- ANZSVS
- Australian and New Zealand Association of Neurologists (ANZAN)
- IRSA
- Neurosurgical Society of Australasia (NSA)
- RANZCR.

In organising the participation of VIRWG members, an effort was made to align relevant proposed services with member's specific areas of expertise. It is acknowledged that reviewing the existing vascular surgery items was the remit of the vascular surgeons on the VIRWG and involved a large number of MBS items and a significant workload.

The VIRWG met via teleconference on 7 occasions: 21 March 2023, 2 May 2023, 8 November 2023, 20 February 2024, 26 March 2024, 23 May 2024 and 8 August 2024. However, the VIRWG's meeting schedule did not permit it to review all agenda items or discuss all relevant MBS items that fell within the formal scope of the Review. A significant amount of the VIRWG's work has been undertaken out-of-session between the final teleconference in August 2024 and August 2025. This has involved substantial email input from individual VIRWG members and numerous teleconferences to finalise specific PICOs and amend existing MBS items or develop new ones. The teleconferences involved the authors of specific PICOs and other VIRWG members with a professional interest in the service/s under consideration.

Background and rationale

Principles and issues

The VIRWG's deliberations and recommendations were premised on the following issues and basic principles:

- vascular and IR/INR care exist within a rapidly evolving clinical and technological landscape
- Medicare expenditure is potentially limited
- there is a potential for reform of MBS items for diagnostic angiography, including diagnostic-only angiography and bundling with procedural services
- there should be an intention to treat when undertaking invasive diagnostic imaging
- a reconsideration of the role of aftercare is required.

The clinical and technological landscape is rapidly evolving

The VIRWG highlighted the rapidly evolving clinical landscape in which these specialties operate in, in part due to technological advancements. These changes result in improved technologies and clinical modalities used to deliver vascular and IR/INR services, both globally and in Australia. Clinical practice in vascular medicine continues to change, with the understanding of vascular diseases growing constantly and new therapeutic procedures being developed. Many factors drive the evolution of vascular medicine, including the ongoing advance of evidence-based practice and innovations in minimally invasive techniques, and technologies that have extended such interventions beyond what may be considered traditional vascular treatment. Specific advances in the management of carotid artery disease and aortic aneurysms include transcarotid artery revascularisation and fenestrated aortic aneurysm repairs, while the use of minimally invasive devices, such as lithotripsy, continue to improve the treatment of occlusive peripheral arterial disease. There has been a dramatic shift towards more endovascular services and less open surgery, particularly in arterial diseases. In the USA, for example, peripheral arterial interventions are now more common than coronary interventions, with a significant increase of interventions for distal arteries.

Further examples of developments in vascular medicine include:

- specialised devices leading to improved rates of crossing chronic total arterial occlusions, even when heavily calcified[2]
- improvements in the long-term safety of vascular access[3]
- the importance of the development of evidence-based concepts to guide treatment, and the establishment of outcomes as a new endpoint for patient management.[4]

In the future, integration of genetic factors, use of artificial intelligence (AI) and robot-assisted procedures and acknowledging the role of the microbiome will likely contribute to how vascular medicine is conducted.[5,6,7] More specifically, integrating AI – although complex – can automate IR procedure tasks like catheter manipulation and needle placement, which improves accuracy and reduces variability.[8] Nanotechnology may be used for vascular lesion investigation and treatment.[5] Magnetic particle imaging (MPI) is an emerging tracer-based technique that may improve blood circulation assessments while reducing background signals seen with more traditional techniques.[9] Some of these advancements may lead to improved cost-effectiveness,[6] but will require careful guidance and development of standards to ensure new technologies are safe and

effective.[8] Future technologies will continue to play a vital role in improving technical success across many settings.

Medicare expenditure is potentially limited

As stated, many rebates for vascular and IR/INR services are currently claimed against existing MBS items that are not specific to the procedure being provided. Thus, these MBS fees may not reflect the complexity of the service or the time required to provide it.

It is expected that a significant proportion of these existing services will transition to the new and amended MBS vascular and IR/INR services items recommended in this report. However, the VIRWG considered the potential fiscal impact of its recommendations on Medicare expenditure and understands the requirement that any changes be either cost-neutral or involve minimal additional expenditure. Proposals to change the MBS, either by introducing new items or amending/combining existing items, are therefore made in full appreciation of the potential fiscal impact of the proposed change. Where possible, specific mitigations have been considered, such as identifying existing MBS items whose use would either decline or which could be removed from the schedule without impacting clinical care.

The VIRWG also recognises that the principle of cost-neutrality means that, where possible, increased fees for some new or amended services may be balanced by fee reductions in other areas. Specific subsets of vascular services have not benefited at the expense of other subsets. Rather, new and amended services will be accommodated within the overall Medicare funding envelope, which does not assign specific proportions of funding to defined groups of services or cohorts of practitioners

The VIRWG recognises that Medicare is an uncapped allocation and it does not contain specialty-specific funding 'buckets' or ration the funding that is available for different specialities. The concept of cost-neutrality is commonly adopted when MBS items, usually but not always in the same group or subgroup, are combined, merged or replaced, with some existing services seeing either reduced usage or no longer being required because new service/s have made them redundant. This may lead to a 'saving' that helps to defray the cost to Medicare of the new/amended service/s. Any items that remain on the MBS continue to attract funding in line with their service usage.

The VIRWG recommends that 19 existing MBS items be amended and 71 new items introduced. The amendments are intended to bring existing items up to date and ensure that MBS reimbursement is equitable. The new MBS items are designed to better reflect modern practice and close critical gaps in patient treatment. It is expected that the introduction of new items will be accompanied by the removal of any existing, superseded items.

All fees included in the Draft Report are indicative only. In finalising its recommended fees, the VIRWG will take the outcomes of the consultation process into account. It is important to note that a final fee structure for the items remains the responsibility of government, which will make its decision(s) in the context of the Federal Budget and supported by modelling that uses the most up-to-date MBS data.

Next steps

Potential for reform of MBS diagnostic angiography items, including diagnostic-only angiography and bundling with procedural services

The VIRWG considers that significant improvements in service effectiveness will be achieved by reforming the current set of diagnostic angiography items and the bundling of diagnostic angiography and fluoroscopy with a range of vascular and IR procedural

services. The proposed reforms are in line with the Taskforce's recommendations 6 and 7[1] and have received strong support from the VIRWG.

Currently, most of the angiography items in Category 5: Diagnostic Imaging Services are categorised both by location in the body and the number of required acquisition runs that are required. The VIRWG addressed this as part of Recommendation 1.

The new general diagnostic items will include only angiography and fluoroscopy. Other diagnostic modalities that are also clinically necessary, such as ultrasound or computed tomography, will continue to attract Medicare rebates in line with current practice.

The VIRWG proposes that diagnostic angiography and fluoroscopy be acknowledged as an essential component of many vascular services, as discussed as part of Recommendation 2.

Under these proposed changes, overall MBS expenditure on vascular diagnostic and procedural services is expected to be better targeted. As noted previously, the VIRWG recognises the principle of cost-neutrality and acknowledged that, while the reform process may result in lower fees for some services, these are likely to be offset by fee increases for other services, with the overall fee structure remaining in balance.

Note: Where Medicare savings are achieved as result of its findings and recommendations, the VIRWG expects that government will reinvest the savings in vascular/IR/INR services.

The VIRWG addresses the potential perception that bundling diagnostic and procedural services will inevitably lead to an overall decrease in the fees paid for some vascular services. The proposed fees for the simple and complex angiography items are based on a rigorous analysis of the current diagnostic angiography fee structure and the pattern of MBS claiming, with losses in some cases being offset by gains in others.

Finally, the VIRWG recognises the need for diagnostic imaging support of procedural services other than vascular procedures. It acknowledges that the proposal to introduce a new set of angiography items that includes just 2 general items means that diagnostic angiography items that are specific to locations in the body will no longer be available for use in conjunction with non-vascular procedures. While a solution for this is beyond the scope of the VIRWG, it anticipates that the Department will take all necessary steps to address any shortfalls in access to diagnostic services that may occur.

Intention to treat when undertaking invasive diagnostic imaging

The VIRWG highlighted that intention to treat a patient must be the underlying principle guiding the use of invasive diagnostic imaging. The VIRWG acknowledges that diagnostic investigation alone may sometimes be clinically necessary but rejected the wholesale use of invasive diagnostic imaging for investigative purposes only, divorced from any intention or expectation to provide a procedural treatment to the patient.

Reconsidering the role of aftercare

For the purpose of Medicare, 'aftercare' refers to medical treatment that is provided to a patient after a procedure that is considered to be part of the overall MBS cost of the initial procedure. For most specialities, it is generally accepted that the provider undertaking the initial procedure is the primary care provider for the patient's hospital stay and will therefore be restricted from claiming MBS services during the aftercare period relevant to the procedure provided. The VIRWG noted that the MBS rules pertaining to aftercare appear to be inconsistent and are not applied equitably across vascular and IR services. It's proposal for a more uniform approach to aftercare is addressed in Recommendation 5.

Risks

The VIRWG acknowledges that there are financial and access risks associated with its recommendations.

Fiscal risk

The VIRWG recognises that the fiscal impact of their recommendations – which include introducing new MBS items, amending existing MBS items and removing current MBS items – may be unpredictable. In particular, the proposals to reduce the current subset of diagnostic angiography items (currently 28 items) to 3 items and bundle angiography and fluoroscopy with relevant vascular procedural and IR/INR items represent a radical shift in the way the MBS treats these procedural and diagnostic modalities. The longer-term effect on provider behaviour and Medicare expenditure will not be known fully until after the new structure is implemented. The VIRWG acknowledges that it is highly likely that the significant changes it is recommending will bring about changes in practice, such as those witnessed in prior tranches like Orthopaedics and Cardiology).

The VIRWG accepts that, where significant cost over-runs are either reasonably predicted or are demonstrated in subsequent MBS data, the Department will consider options that mitigate Medicare's fiscal exposure. In view of this, the VIRWG acknowledges that some of its draft recommendations may need to be delayed, not implemented or amended/removed after implementation.

The VIRWG notes that the Department has flagged that any decision to delay, amend or remove new or amended items will be the subject of full consultation with stakeholders. In this context, the VIRWG acknowledges that any changes resulting from its deliberations will be considered in the Budget process, and that the adoption of any specific item or group of items is not guaranteed. Budget initiatives are a decision of government, for which the responsible use of taxpayer funds is a core principle.

Uncertain access to new devices

The VIRWG recognises a risk that access to a significant proportion of the new and amended services, or the fees that patients are required to pay for services, will be adversely affected by barriers to listing certain categories of devices on the Prescribed List of Medical Devices and Human Tissue Products (PL). The VIRWG has addressed this as part of Recommendation 16.

Recommendations

The VIRWG's recommendations were informed by the Principles and issues, which are intended to provide a more detailed framework for reform for vascular, IR and INR services.

MBS interventional radiology diagnostic items and bundled services

Recommendation 1

Simplify and modernise diagnostic-only angiography services and reduce the current set of items for diagnostic angiography to two items.

Currently, the angiography subgroup in Category 5 - Diagnostic Imaging Services - of the MBS contains 28 items. Most of the items are categorised both by location (head and neck, thorax, abdomen, upper limb[s], lower limb[s], aorta and lower limb[s]) and by the number of acquisition runs that are required (1–3, 4–6, 7–9 and 10 or more). The VIRWG proposes reducing the current set of items to two new items that are not location specific: simple (based on a weighted average of the existing MBS items for lower acquisition runs) and complex (for 10 or more runs). MBS data showed that most diagnostic angiography services fell within 1–3 services and 10 or more services. Modelling generated MBS fees based on current patterns of billing and service usage. The proposed fees are:

- simple = $800.84
- complex = $1,660.57.

Notes:

- *The new structure will retain MBS item 59970 – angiography or digital subtraction angiography, or both, with fluoroscopy and image acquisition, using a mobile image intensifier.*
- *The proposed fees are indicative only, based on information provided by VIRWG members. The final fee structure for the items will be a decision of government, based on modelling utilising the most recent MBS data and developed in the context of the Federal Budget.*
- *Recommendation 6 in the Taskforce's report[1] proposes that the current run-based tiering and anatomical classifications of diagnostic angiography be removed.*
- *The fees of existing items that have not been reviewed, and for which there is a legitimate requirement for angiography or fluoroscopy, will need to be raised to include the bundled angiography fluoroscopy fee component. The item descriptor of each affected item will also need to be amended to include the standard phrase 'Including all associated angiography and fluoroscopy'.*

Recommendation 2

Neuroradiology diagnostic-only services (for head, neck and spine) to remain separate services and will not be covered under the revised structure proposed for diagnostic angiography items.

The VIRWG notes that neuroradiology procedures require significant diagnostic planning. It regards the retention of specific diagnostic radiology items for the head and neck to be clinically appropriate in this context.

Recommendation 3

Ensure that procedures that sit outside of the vascular/IR/INR section of the MBS do not lose access to angiography and fluoroscopy services that are clinically necessary.

The VIRWG identified this as an issue that is technically beyond its scope. However, it requests that the Department determine the extent to which the diagnostic angiography items are used by medical practitioners who do not provide vascular services and explore options to ensure that clinically appropriate diagnostic services remain available. This will require alignment of the identified services with either the simple or complex diagnostic angiography items.

Recommendation 4

Where possible, combine angiography and fluoroscopy with vascular procedures.

The VIRWG proposes that, where angiography and fluoroscopy are integral to a vascular procedural service, the diagnostic and procedural elements should be bundled together and the MBS-recommended fee increased to reflect the combined nature of the service. Where this occurs, the fee for the bundled service will be a combination of:

- the current MBS procedural fee (or the proposed procedural fee of a new service), and
- the MBS fee for the proposed simple or complex diagnostic angiography item. For the purposes of formulating the respective proposed fees, the Department captured all existing claiming data for MBS items 59970–60078 and 61109, which provides a cost-neutral weighted average simple and complex fee.

Note: Recommendation 7 in the Taskforce's report[1] proposes the bundling of procedural items with relevant angiographic items where appropriate.

The role of aftercare

Recommendation 5

Remove aftercare restrictions from all in-scope vascular and interventional radiology items.

Historically, endovascular and interventional item numbers have excluded aftercare and IR and INR providers have not been the primary care providers for patients requiring intervention, rather, the primary provider (or admitting provider) has requested that the IR/INR provider undertake a certain procedure as the preferred treatment approach. In this scenario, the patient always remains under the care of the primary requesting provider.

The VIRWG discussed the potential for IR/INR providers to become more active in the primary provider role. It noted that vascular surgeons were more likely to reject the notion that IR specialists have the training or experience to be a primary care provider. This perspective was based on a view that, not having been 'in charge of' patients' overall care historically, IR specialists' understanding of the full requirements of the role may be limited and restricted to a narrow set of circumstances.

The VIRWG acknowledges ongoing advances in IR treatment, and particularly the growth in less invasive services, including those that can be delivered using IR/INR

alone. The IR/INR specialists on the VIRWG also confirmed that established training programs appropriately prepare IR providers to be the primary provider for patients requiring IR procedures, with well-established examples of direct general practice referral to IR providers for hospital-based care. The issue is further complicated by restrictions on hospital admission rights in some states and territories. In addition, many of the existing MBS items used by IR/INR providers specifically exclude aftercare, reflecting a view that the services are commonly provided on behalf of a patient's primary provider.

The VIRWG recommends that aftercare restrictions applying to all MBS items in the vascular/IR/INR sector be removed. It regards this to be the only equitable and effective solution to the inconsistent and confusing application of the aftercare rules, and the best to way to ensure that the aftercare arrangements are not misused.

Intention to treat

Recommendation 6

Medical practitioners undertaking invasive diagnostic services must always do so with the intention of treating the patient.

The VIRWG considers that, unless it is clinically necessary, the use of diagnostic services for purposes other than patient treatment should be discouraged. In this context, 'clinically necessary' includes diagnostic monitoring that is necessary to ensure patient safety and investigations required as a precursor to treatment.

It is the correct intention to attempt to perform intervention for revascularisation as an adjunct to other procedures. However, it is not always appropriate or possible to proceed (based on technical, anatomical or clinical status factors that only become apparent during the diagnostic study). If the intention is to support the claim for 'abandoned procedure' (item 30001) – then this should be stated in the explanatory notes. It is acknowledged that the following scenarios are currently supported by the MBS rules:

- If the diagnostic component is completed but cannot continue due to the aforementioned reasons not to proceed, the diagnostic-only service should be claimed.
- If the diagnostic component is completed and the intervention component has commenced, then item 3001 should be claimed with the relevant procedural item.
- Alternatively, a list of (non-bundled) procedures where co-claiming the diagnostic angiography is valid in some circumstances could be included in the descriptor.

Open, endovascular and hybrid approaches to treatment

Recommendation 7

Existing MBS items for open vascular procedures must be amended to also include endovascular and hybrid approaches, where it is clinically appropriate.

The VIRWG considers that, in some cases, the distinction between open and endovascular/hybrid approaches, in terms of complexity and technical difficulty, has been erased by improvements in the technologies and clinical modalities that are used to deliver vascular services. It supports the addition of endovascular/hybrid approaches to open vascular procedures wherever this is clinically appropriate and supported by evidence, and amendment of the relevant MBS items. It also notes that the endovascular approach has already replaced the open approach in many cases.

Recommendation 8

Ensure that the same MBS fees are paid for open surgical and endovascular treatment approaches, where this is appropriate and reasonable.

In keeping with Recommendation 7, the VIRWG recommends that the MBS fees that are paid for open vascular services that have recognised endovascular/hybrid equivalents be regularised to ensure that practitioners delivering these services receive the same fee regardless of treatment modality.

The VIRWG recognises that this may not be possible in every case and should only apply where there is evidence supporting the clinical equivalence of the open, endovascular and hybrid approaches.

Recommendation 9

Where an endovascular equivalent to an open surgical procedure does not exist, there will be no change.

The VIRWG notes that the changes proposed in recommendations 7 and 8 can only apply where there is a recognised endovascular or hybrid equivalent to an open surgical procedure Where this is not the case, the current MBS items for open vascular procedures will continue to apply without change.

Complexity modifiers

Recommendation 10

Development of generic complexity modifiers based on a percentage of the recommended item fee. For procedures with additional clinical components, compared to what is expected of a standard procedure.

The VIRWG proposes that MBS modifier items be developed to better reflect the complexity of vascular services. The simplest method that will not add an unsustainable number of new items to the MBS is to introduce special purpose items that enable a percentage increase in the MBS fee paid for a service, based on its relative complexity compared to other vascular services. Examples of modifier items already exist on the MBS and have proven to be an effective method of compensating clinicians for services where higher costs are likely to be incurred in specific circumstances.

An initial scale of increases, up to a maximum of 50% of the unmodified MBS fee for the service is proposed. The fee scale would begin at 10% of the MBS fee, scaling up at 10% intervals to the maximum payment.

The VIRWG understands that a complexity modifier is not a clinical item, rather it is an administrative item intended to modify the fee of another MBS item. The VIRWG called on the Department to ensure that this distinction, and the modifier items' exemption from the Multiple Operation Rule, is clearly expressed in legislation and the MBS rules.

Clarifying MBS categories and terminology

Recommendation 11

Change the title of MBS vascular Subgroup 3 to include interventional radiology or create a new interventional radiology subgroup.

Recommendation 12

Amend the title of Category T8 – Surgical Operations, Subgroup 3 – Vascular, Subheading 12 – Endovascular Interventional Procedures to reflect the procedures included under Subheading 12 accurately.

The VIRWG flagged that the MBS's lack of specificity regarding IR/INR services leads to misunderstandings on the part of IR/INR specialists. The VIRWG recognised that the most significant impact may relate to private health insurers, where the current placement of IR items on the MBS means that patients without 'vascular' coverage may not be reimbursed for a range of IR procedures due to a perceived identification of the procedures as being vascular-only services.

Recommendations 10 and 11 reflect slightly different approaches to the issue of IR/INR recognition on the MBS.

Note: Recommendation 39 of the Taskforce's report1 proposes changing the title of Subgroup 3 'Vascular' in Category T8 – Surgical Procedures – to 'Vascular, Endovascular and Interventional Radiology'.

Recommendation 13

Restrict the new MBS items for diagnostic radiography to Subgroup T8.

The VIRWG recommends that the proposed new items for diagnostic-only angiography services be placed in Subgroup T8 – Surgical Operations – of Category 3, consistent with the existing coronary angiography items. Further, it is recommended that similar accreditation requirements for sites that are applied in the diagnostic imaging accreditation scheme should be applied.

Recommendation 14

Ensure that the terms used in MBS item descriptors and explanatory notes to describe clinical procedures are the same as the terms that are used in medical practice.

The VIRWG notes that there are inconsistencies in how medical services are described in the MBS, compared to accepted medical usage, and requested that the Department review relevant item descriptors and explanatory notes to ensure their clarity.

Recommendation 15

Amend current private health insurance membership rules to extend eligibility for vascular services to patients with a Bronze memberships.

The VIRWG is mindful that an unintended consequence of changing the location of vascular services on the MBS may be to entrench its unfavourable treatment by health insurers and private hospitals.

The VIRWG noted concerns that current membership rules may be misinterpreted and poorly implemented by insurers and private hospitals, leading to higher patient costs and having a negative impact on hospital access.

Adding devices to the Prescribed List

Recommendation 16

Improve the procedure for adding new devices to the Prescribed List of Medical Devices and Human Tissue Products.

The VIRWG identified access to the PL as a key barrier to accessing cost-effective and affordable vascular services that require an implantable device that does not remain in the body. Despite the often-high cost of these devices, they are unlikely to meet the requirements under Part A (surgically implanted medical devices) or Part C (devices that don't meet the criteria for Part A) of the Prescribed List.

The VIRWG has noted that some clinicians – especially vascular surgeons – have used exceptional workarounds to ensure services can be provided to patients, such as purchasing a device for private resale to a patient. In addition, private hospitals are increasingly unable to pay for the devices that are required to undertake a vascular procedure, and private health insurers are unwilling to bear the cost of devices that are not on the PL. The VIRWG recognises that government policy limits MBS payments to the medical practitioner's professional service and does not include the cost of devices and consumables. It therefore recommends that the Department urgently review the processes for listing new devices on the PL, with the aim of improving service affordability and patient access.

Promoting specialist IR/INR practitioners' access to MBS specialist consultation items and self-determining the need for diagnostic imaging when managing patients for interventional procedures

Recommendation 17

Amend MBS items 104 and 105 to include specialist Interventional Radiologists and Interventional Neuroradiologists as eligible practitioners.

The IR members of the VIRWG noted that contemporary interventional radiology is a patient-facing, clinical specialty that requires close patient consultation before and after performing interventions. This is distinct from diagnostic radiology, where there is minimal requirement to consult with patients on routine imaging, with management of the imaging results routinely undertaken by the requesting provider. As a result, radiologists who are recognised IR/INR specialists have been audited regarding their use of MBS consultation items 104 and 105, despite using the items appropriately. IR members have therefore recommended that the relevant legislation be amended, if required, to ensure that radiologists who are recognised IRs and INRs, as defined by RANZCR, are eligible practitioners for the purposes of items 104 and 105.

Proposed Recommendation 17 was discussed during the MRAC meeting on 19 August and consequently endorsed by MRAC for consultation.

Recommendation 18

Remove restrictions that prevent specialist Interventional Radiologists and Interventional Neuroradiologists from self-determining the need for diagnostic tests.

In recognition of the increasingly clinical nature of IR/INR, and the increased provision of diagnostic services by specialist surgeons and physicians, the specialist IR/INR members of the VIRWG believe that the historical restrictions on radiologists being able to self-determine diagnostic tests places them at a disadvantage and creates an inconsistency in the schedule. In common with other specialists, IR and INR clinicians often need to refer patients for additional diagnostic studies when determining suitability for intervention. While the existing restrictions on diagnostic radiologists self-determining diagnostic tests are appropriate, the increasing role played by IR and INR specialists in making treatment decisions and delivering care creates a barrier to efficient and affordable patient care provided by these clinicians. IR/INR members also noted that the

performance of diagnostic studies by non-radiologists is increasing, leading to a system that does not treat IR and INRs consistently with other specialist practitioners. Removing the restriction on IR/INRs acting in their specialist roles, as defined and recognised by RANZCR, will help to create a more equitable environment for these practitioners and remove a significant barrier to patient access.

Proposed Recommendation 18 was discussed during the MRAC meeting on 19 August and consequently endorsed by MRAC for consultation.

Other recommendations

Recommendation 19

Introduce appropriate theatre banding levels for IR/INR specialists.

The VIRWG expressed concern about the low level of theatre banding applied to IR/INR services. The VIRWG agreed that this situation is untenable and recommended that the National Procedure Banding Committee (NPBC) review the current theatre banding level applied to IR/INR, with a view to improving these arrangements in future.

The VIRWG acknowledges that the NPBC is independent of the Department.

Recommendation 20

Develop a program of pre-surgery exercises that are eligible for MBS rebates.

The VIRWG stressed the importance of pre-surgery exercises for patients undergoing vascular procedures, noting that supervised exercise programs should be the primary intervention in patients with claudication. Currently, and with the exception of a few teaching hospitals doing research in this area, there is limited access to appropriately resourced programs for vascular patients, despite the available evidence of its effectiveness. Vascular patients are required to fund this themselves, as it is typically 12 weeks of multiple visits per week, and the allied health visits related to chronic disease management programs are quickly exhausted. The outcomes of vascular interventions may also be better when adjuvant exercise programs are offered. The VIRWG therefore supported the development and implementation of an MBS item for this purpose and recommended that the Department explore options for facilitating pre-surgery exercises for eligible patients through the MBS.

The VIRWG recognises that the MBS may not be the most suitable mechanism for this purpose and would also support a non-MBS solution, if necessary. Members noted that this may achieved through a peripheral arterial chronic disease management pathway or program.

PICO assessments

As identified by the Taskforce,[1] many VIR and IR procedures are being performed with no current MBS rebate that reflects the procedure accurately in terms of time or complexity. Currently, these services may be claimed under existing items with broader descriptors. RANZCR, in consultation with the IRSA and the ANZSNR also proposed new and amended VIR and INR items (both procedural and diagnostic) for procedures that are not currently listed on the MBS.

The VIRWG considered the submissions in line with the MBS Continuous Review Guiding Principles (Appendix 1) and the assessment tool, which is based on the PICO framework (Appendix 2). The proposed MBS item descriptors were also assessed as per Appendix 3.

The VIRWG contributed 75 PICOs addressing a wide range of vascular IR/INR and surgical services. An additional PICO was received in early 2025 as a referral from the Medicare Services Advisory Committee (MSAC) Secretariat.

The PICOs are categorised as follows:

1. diagnostic-only angiography/fluoroscopy
2. aneurysm repair
3. occlusion
4. thrombosis
5. arteriovenous AVF/ malformation repair
6. dialysis access
7. embolisation
8. ablation
9. miscellaneous vascular
10. INR intervention
11. IR (endovascular)
12. percutaneous repair (non-vascular).

Of the 76 PICOs, 17 were incorporated into or replaced by other PICOs and one – PICO 27 (IVUS to be substituted for angioscopy) – was identified as better suited for consideration by MSAC. Where PICOs have been combined or replaced, this is indicated in the table of new and amended MBS items.

New and amended MBS items, descriptors and fees

1 Diagnostic-only angiography/fluoroscopy

PICO	Item descriptor	VIRWG proposed fee
PICO 73 – Angiography (replaces **PICO 4**)	**New item – MBS item 1001DAF** Simple percutaneous catheter-based diagnostic imaging, any anatomical region, without a surgical procedure, if: a) including either or both: i. angiography; or ii. fluoroscopy; and b) not in association with a service to which item **1002DAF** applies. (H) (Anaes.) Note: Where clinically relevant, diagnostic services other than angiography and fluoroscopy may be co-claimed with this item.	$800.84
PICO 73.1	**New item – MBS item 1002DAF** Complex percutaneous catheter-based diagnostic imaging, any anatomical region, without a surgical procedure, if: a) including either or both: i. angiography; or ii. fluoroscopy; and	$1,660.57

PICO	Item descriptor	VIRWG proposed fee
	b) not in association with a service to which item **1001DAF** applies. (H) (Anaes.) Note: Where clinically relevant, diagnostic services other than angiography and fluoroscopy may be co-claimed with this item.	
PICO 30 – Cerebral venography by digital subtraction angiography technique using a co-axial system for the cannulation of intracranial veins	**New item – MBS item 1003DAF** Diagnostic cerebral venography by digital subtraction angiography, if the indication is confirmed by an appropriate imaging modality such as: a) computed tomography; or b) magnetic resonance imaging; or c) prior angiography d) not in association with a service to which item **1001DAF or 1002DAF** applies Including all associated angiography and fluoroscopy. (H) (Anaes.)	$1,660.57
PICO 30.1	**New item – MBS item 1004DAF** Use of a co-axial system and microcatheter, in conjunction with a service to which item **1003DAF** applies (cerebral venography), if the service is: a) to perform pressure manometry to qualify degree of stenosis for the determination of revascularisation; or b) to obtain serum samples from the inferior petrosal sinus for the localisation of endogenous hypercortisolism; or c) to perform balloon occlusion test to localise the source of pulsatile tinnitus for the determination of revascularisation or occlusion	$500.00

PICO	Item descriptor	VIRWG proposed fee
	not in association with a service to which item **1001DAF or 1002DAF** applies. (H) (Anaes.)	
PICO 62 – Cerebral angiography – acute cerebrovascular or paediatric patients	**New item – MBS item 1005DAF** Diagnostic cerebral angiography: a) for a patient: i. with an acute cerebrovascular presentation; or ii. is under 17 years (paediatric); and iii. is confirmed by an appropriate imaging modality (CT, MRI or angiography); or b) suspected symptomatic cerebral vasospasm; and c) not in association with a service to which item **1001DAF or 1002DAF** applies Including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	$2,300.00
PICO 63 – Cerebral angiography – elective	**New item – MBS item 1006DAF** Diagnostic cerebral angiography, in investigation of elective patients with: a) suspected or previously treated cerebrovascular disease, and the indication is confirmed by appropriate non-invasive imaging; and b) including any aortography or branch vessel angiography; and c) not in association with a service to which item **1001DAF or 1002DAF** applies Including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	$1,660.57

2 Aneurysm repair

Subcategory	PICO	Item descriptor	VIRWG proposed fee
Thoracoabdominal aneurysms	PICO 16.1	**Amend item – MBS item 33148** Elective, symptomatic, acute or ruptured thoraco-abdominal aortic aneurysm, replacement by graft, by endovascular, open or hybrid approach, if: a) One of the following apply: i. aneurysm rupture, item **3335M** can be claimed in conjunction; or ii. acute or symptomatic (other than rupture), item **3333M** can be claimed in conjunction: b) not including implantation of visceral or aortic arch branch grafts including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	$6,000.00 (maximum fee)
Iliac aneurysms	PICO 16.2	**Amend item – MBS item 33124** Unilateral - elective, symptomatic, acute or ruptured iliac artery aneurysm (common, internal, iliac) by open, endovascular or hybrid techniques, if: a) One of the following apply: i. aneurysm rupture, item **3335M** can be claimed in conjunction; or ii. acute or symptomatic (other than rupture), item **3333M** can be claimed in conjunction: and b) including insertion of stent grafts with or without administration of agents to occlude vessels; and c) not including aneurysms excluded by standard bifurcated aortic aneurysm stent grafts including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	$2,500.00

Subcategory	PICO	Item descriptor	VIRWG proposed fee
Visceral aneurysms	**PICO 23** – Treatment of peripheral arterial aneurysms	**New item – MBS item 2002ANR** Unilateral- elective, symptomatic, acute or ruptured peripheral arterial aneurysms, by endovascular, open or hybrid techniques, if: a) One of the following apply: i. aneurysm rupture, item **3335M** can be claimed in conjunction; or ii. acute or symptomatic (other than rupture), item **3333M** can be claimed in conjunction: and b) including: iii. insertion of one or more stents: or iv. administration of agents to occlude one or more arteries including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	$2,100.00
	PICO 57.7	**Amend item – MBS item 33172** Ruptured or traumatic Aneurysm of major artery, repair by open, endovascular or hybrid techniques, if: a) Including either or both: i. ruptured; or ii. traumatic; and b) replacement by graft; and c) for traumatic injury item **3335M** can be claimed in conjunction; and d) not being a service to which another item in this subgroup applies. Including all associated angiography and fluoroscopy.	$3,000.00

Subcategory	PICO	Item descriptor	VIRWG proposed fee
		(H) (Anaes.) (Assist.)	
	PICO 24 – Treatment of trunk aneurysms as independent procedure	**Amend item – MBS items 33130** Elective, symptomatic, acute or ruptured non-aortic aneurysm(s) of the chest, abdomen and pelvis, (including visceral arteries) involving a single vessel, by endovascular, open or hybrid techniques including: a) either or both: i. insertion of one or more stents; or ii. administration of agents; and b) One of the following apply: i. aneurysm rupture, item **3335M** can be claimed in conjunction; or ii. acute or symptomatic (other than rupture), item **3333M** can be claimed in conjunction including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	$3,000.00
Endoleaks	**PICO 47**	**New item – MBS item 2003ANR** Treatment of type 2 endoleak, after a previous aortic aneurysm repair, which is causing significant aneurysm sack expansion (or clinical concern), by endovascular, open or hybrid techniques, including all associated angiography and fluoroscopy. Not in association with services to which items 33112, 33115, 33116, 33118, 33119, 33121, 33124, 33127, 33130 or 33133 apply. (H) (Anaes.) (Assist.)	$2,200.00
	PICO 60 – Type 1a	**New item – MBS item 2004ANR** Treatment of endoleak, after a previous aortic aneurysm repair, which is causing	$2,500.00

Subcategory	PICO	Item descriptor	VIRWG proposed fee
	endoleak without visceral extension, Type 1b without extension and Type 3 endoleaks	significant aneurysm sack expansion (or clinical concern), by endovascular, open or hybrid techniques, a) For a patient with: i. type 1a endoleak without extension into the visceral segment of the aorta; or ii. Type 1b endoleak without extension beyond the internal iliac; or iii. type 3 endoleak; and b) not in association with services to which items 33112, 33115, 33116, 33118, 33119, 33121, 33124, 33127, 33130 or 33133 applies. Including all associated angiography and fluoroscopy imaging (H) (Anaes.) (Assist.)	
Juxtarenal and suprarenal aneurysms	**PICO 48** – Endovascular repair of suprarenal abdominal aortic aneurysm	**Amend item – MBS item 33112** Elective, symptomatic, acute or ruptured suprarenal abdominal aortic aneurysm (AAA) by open, endovascular or hybrid approach, if: a) including three or more, branch revascularisations or fenestrations and stents; and b) One of the following apply: i. aneurysm rupture, item **3335M** can be claimed in conjunction; or ii. acute or symptomatic (other than rupture), item **3333M** can be claimed in conjunction Including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	$4,400.00

Subcategory	PICO	Item descriptor	VIRWG proposed fee
	PICO 49 – Endovascular repair of juxtarenal abdominal aortic aneurysm	**Amend item - MBS item 33115** Elective, symptomatic, acute or ruptured juxtarenal abdominal aortic aneurysm by open, endovascular or hybrid approach, if: a) including up to two fenestrations and stents; and b) One of the following apply: i. aneurysm rupture, item **3335M** can be claimed in conjunction; or ii. acute or symptomatic (other than rupture), item **3333M** can be claimed in conjunction Including all associated angiography and fluoroscopy. Including aftercare. (H) (Anaes.) (Assist.)	$4,000.00
Infrarenal aneurysms	**PICO 50** – Endovascular repair of infrarenal abdominal aortic aneurysm	**Amend Existing item - MBS item 3311** Elective, symptomatic, acute or ruptured infrarenal abdominal aortic aneurysm (AAA) by open, endovascular or hybrid approach, if: a) aneurysm rupture, item **3335M** can be claimed in conjunction; or b) acute or symptomatic (other than rupture), item **3333M** can be claimed in conjunction Including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	$3,200.00
Complexity modifiers	Complexity Modifier –10% (PICO 48-49-50)	**New item – MBS item 3331M** Modifier for a procedure of mild complexity.	$3,200.00

Subcategory	PICO	Item descriptor	VIRWG proposed fee
	Complexity Modifier – 20% (PICO 48-49-50)	**New item – MBS item 3332M** Modifier for a procedure of mild to moderate complexity.	$3,200.00
	Complexity Modifier – 30% (PICO 48-49-50)	**New item – MBS item 3333M** Modifier for a procedure of moderate complexity.	$3,200.00
	Complexity Modifier – 40% (PICO 48-49-50)	**New item – MBS item 3334M** Modifier for a procedure of moderate to extreme complexity.	$3,200.00
	Complexity Modifier – 50% (PICO 48-49-50)	**New item – MBS item 3335M** Modifier for a procedure of extreme complexity.	$3,200.00
Descending thoracic aortic aneurysms	**PICO 58** – Thoracic aneurysms	**New item – MBS item 2005ANR** Elective, symptomatic, acute or ruptured descending thoracic aortic aneurysm, including debranched arch of aorta, by endovascular, open or hybrid techniques, if	$3,500.00

Subcategory	PICO	Item descriptor	VIRWG proposed fee
		a) One of the following apply: i. aneurysm rupture, item **3335M** can be claimed in conjunction; or ii. acute or symptomatic (other than rupture), item **3333M** can be claimed in conjunction; or b) other than a service associated with a service to which items 38568 or 38571 apply including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	
Arch aneurysm repair	PICO 58.2	**New item – MBS item 2007ANR** Elective, symptomatic, acute or ruptured aortic aneurysm involving Zone 0-3, when aortic arch debranching is not required, by open, endovascular or hybrid approach, if: a) One of the following apply: i. aneurysm rupture, item **3335M** can be claimed in conjunction; or ii. acute or symptomatic (other than rupture), item **3333M** can be claimed in conjunction; and b) not including implantation of branch stents including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.) Note: Items 3002OCC and 3003OCC can be co-claimed when clinically appropriate	$4,600.00

3 Occlusion

Subcategory	PICO	Item descriptor	Fee
Upper limb, arch aortic branch	**PICO 2** – Peripheral arterial	**New item – MBS item 3001OCC** Endovascular treatment of occlusive disease of one or more upper limb arteries	To be confirmed

Subcategory	PICO	Item descriptor	Fee
occlusions and carotid disease	revascularisation for occlusive disease of the upper limb by endovascular means	including the axillary, brachial, ulnar, radial and arteries of the hand by any endovascular technique, if: a) chronic limb-threatening ischaemia, item **3332M** can be claimed in conjunction; and b) including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	
	PICO 3 – Aortic arch branches (incorporates **PICO 55**)	**New item – MBS item 3002OCC** Arterial revascularisation of one aortic arch branch for occlusive disease by open, endovascular or hybrid approach, if one of the following arteries are treated: a) brachiocephalic; or b) subclavian; or c) common carotid arteries Including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	$2,000.00
	PICO 3.1	**New item – MBS item 3003OCC** Arterial revascularisation of aortic arch branches for occlusive disease by open, endovascular or hybrid approach, two or more of the following arteries are treated: a) brachiocephalic; or b) subclavian; or c) common carotid arteries. Including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	$2,500.00
	PICO 3.2 (carotid	**Amend item – MBS item 35307**	$2,700.00

Subcategory	PICO	Item descriptor	Fee
	bifurcation stenting)	Transluminal stent insertion, for carotid bifurcation disease, 1 or more stents, with or without associated balloon dilation, for 1 internal carotid artery, by open, endovascular or hybrid approach, with or without the use of an embolic cerebral protection device, in patients who: a) for carotid intervention i. meet the indications for carotid endarterectomy; and ii. have medical or surgical comorbidities that would make them at high risk of perioperative complications for carotid endarterectomy, and b) the service is performed in conjunction with a service to which items **3002OCC** or **3003OCC** applies. Including all associated angiography and fluoroscopy Multiple Operation Rule (H) (Anaes.) (Assist.)	
Thoracic and abdominal aortic stenosis/occlusion	**PICO 44** – Occlusion of aorta and aortic bifurcation (incorporates PICO 53)	**New item – MBS item 3004OCC** Restoration of patency of stenotic or occlusive disease of the thoracic or abdominal aorta, by endovascular, open or hybrid approach: a) with or without atherectomy; and b) with or without, one or more stents; and c) not for aneurysm repair; and d) not including associated procedures required to maintain patency of visceral branches. Including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.) Note: Item **3013OCC** can be co-claimed when clinically appropriate	$2,500.00

Subcategory	PICO	Item descriptor	Fee
Aortoiliac occlusion	**PICO 9** - Aorta and aortic bifurcation occlusion (incorporates **PICO 53**) Non-aneurysmal abdominal aortic reconstruction, including occlusion of both common iliac arteries	**New item – MBS item 3005OCC** Restoration of patency of occlusive disease of the abdominal aorta, by endovascular, open or hybrid approach: a) with or without atherectomy; and b) with or without, one or more stents; and c) including occlusion of both common iliac arteries; and d) not for aneurysm repair; and e) not including associated procedures required to maintain patency of visceral branches. Including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.) Note: Item **3013OCC** can be co-claimed when clinically appropriate	$2,500.00
	PICO 44.1 (incorporates **PICO 53**)	**New item – MBS item 3006OCC** Complete endovascular reconstruction of the aortic bifurcation (CERAB) by endovascular or hybrid approach, if: a) with or without atherectomy; and b) including stenting of the distal aorta and iliac arteries; and c) not for aneurysm repair; and d) not including associated procedures required to maintain patency of visceral branches. Including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	$3,000.00
Lower limb	**PICO 42** – Lower	**New item – MBS item 3007OCC**	$1,750.00

Subcategory	PICO	Item descriptor	Fee
occlusive disease	limb intervention proposal based on intervention complexity	Treatment of occlusive lower limb arterial disease involving the common iliac, external iliac, common femoral, profunda femoris, superficial femoral, popliteal arteries causing intermittent claudication, by open, endovascular or hybrid approach, including: Low complexity: a) maximum of two stenoses; and b) single limb treated; and c) arteries above the level of the tibial arteries; and d) any combination of treatment modalities; and e) including closure by percutaneous closure device; and f) for chronic limb-threatening ischaemia, with tissue loss or rest pain, modifier item **3011OCC** can be claimed in conjunction including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	
	PICO 42.1	**New item – MBS item 3008OCC** Treatment of occlusive lower limb arterial disease involving the common iliac, external iliac, common femoral, profunda femoris, superficial femoral, popliteal, tibial arteries causing intermittent claudication, by open, endovascular or hybrid approach, including: Medium complexity: a) more than two with a maximum of four stenoses >70%; and b) lesions of both limbs may be included; and c) lesions of the tibial arteries may be included; and d) any combination of treatment modalities; and	$2,000.00

Subcategory	PICO	Item descriptor	Fee
		e) including closure by percutaneous closure device; and f) for chronic limb-threatening ischaemia, with tissue loss or rest pain modifier item **3011OCC** can be claimed in conjunction including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	
	PICO 42.2	**New item – MBS item 3009OCC** Treatment of occlusive lower limb arterial disease involving the common iliac, external iliac, common femoral, profunda femoris, superficial femoral, popliteal arteries causing intermittent claudication, by open, endovascular or hybrid approach, including: High complexity: a) greater than four lesions or less than four lesions if one lesion is a chronic total occlusion; and b) lesions on one or two limbs treated; and c) arteries treated at any lower limb arterial level; and d) any combination of treatment modalities; and e) closure by percutaneous closure device; and f) for chronic limb-threatening ischaemia, with tissue loss or rest pain, modifier item **3011OCC** can be claimed in conjunction. including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	$2,500.00
	PICO 42.4	**New item – MBS item 3011OCC** Critical limb-threatening ischaemia modifier	$1,000.00

Subcategory	PICO	Item descriptor	Fee
	PICO 42.5	**New item – MBS item 3012OCC** Treatment of asymptomatic occlusive lower limb arterial disease, involving the common iliac, external iliac, common femoral, profunda femoris, superficial femoral, popliteal arteries causing threat to patency of pre-existing bypass or stent, by open, endovascular or hybrid approach, including closure by percutaneous closure device. Including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	$1,500.00
	PICO 45 – Revascularisation of visceral branches of abdominal aorta (replaces **PICO 25**)	**New item – MBS item 3013OCC** Treatment of occlusive disease of the branches of the abdominal aorta, including coeliac, superior mesenteric, renal, inferior mesenteric and internal iliac arteries (one vessel), by open, endovascular or hybrid approach including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	$2,500.00
	PICO 45.1 – see Aneurysm repair		
Chronic central and major venous stenosis or occlusion	**PICO 41** – Lower limb intervention proposal based on intervention complexity	**New item – MBS item 3014OCC** Treatment of chronic central venous stenosis or occlusion, when not responding to optimal medical therapy, including resistance to non-surgical treatment, by open, endovascular or hybrid approach if: a) symptomatic venous insufficiency is present in the lower limb, including one or more of the following: i. oedema of affected limb; or ii. lower limb ulceration; or iii. venous claudication; or	$2,000.00

Subcategory	PICO	Item descriptor	Fee
		b) symptomatic venous insufficiency in the superior vena cava or brachiocephalic vein, including one or more of the following: i. oedema (face, neck, arms and upper body); or ii. shortness of breath (not due to respiratory disease). Including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	
	PICO 41.1	**New item – MBS item 3015OCC** Treatment of stenosis or occlusion of major limb vein, when not responding to optimal medical therapy, including resistance to non-surgical treatment, by open endovascular or hybrid, approach, if symptomatic venous insufficiency is present in the lower limb, including one or more of the following: a) oedema of affected limb; or resistant to non-surgical measures. b) lower limb ulceration. c) venous claudication. Including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	$1,500.00

4 Thrombosis

PICO	Item descriptor	Fee
PICO 17 –Thrombolysis thrombectomy	**New item – MBS item 4001THR** Open, hybrid or endovascular treatment of acute thrombosis (or embolus) of a major artery (aorta, common iliac, subclavian axillary or aortic stent, iliac stent) initial procedure including:	$2,596.25

PICO	Item descriptor	Fee
	a) use of mechanical devices; and b) use embolic protection devices (if required); and c) administration of thrombolytic agents by pulse spray or continuous infusion (if required). Including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	
PICO 17.1	**New item – MBS item 4002THR** Open, hybrid or endovascular treatment of acute thrombosis (or embolus) of a major artery (aorta, common iliac, subclavian axillary or aortic stent, iliac stent) or arterial device, **second procedure**, including: a) use of mechanical devices; and b) use embolic protection devices (if required); and c) administration of thrombolytic agents by pulse spray or continuous infusion (if required). Including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	$1,298.10
PICO 17.2	**New item – MBS item 4003THR** Open, hybrid or endovascular treatment of acute thrombosis of a major vein (superior vena cava, inferior vena cava, subclavian, axillary, common iliac, external iliac) by administration of thrombolytic agents by pulse spray or continuous infusion, **initial procedure**, including: a) use of mechanical devices; and b) use of an IVC filter. Including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	$2,596.25
PICO 17.3	**New item – MBS item 4004THR**	$1,298.10

PICO	Item descriptor	Fee
	Open, hybrid or endovascular treatment of acute thrombosis of a major vein (superior vena cava, inferior vena cava, subclavian, axillary, common iliac, external iliac) by administration of thrombolytic agents by pulse spray or continuous infusion, **second procedure**, including: a) use of mechanical devices; and b) use of an IVC filter. Including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	
PICO 18 – Thrombolysis thrombectomy of arteries AVF	**New item – MBS item 4005THR** Endovascular, open or hybrid treatment if: a) the patient is experiencing acute thrombosis of an: i. peripheral artery or vein; or ii. arterial device such as bypass graft/stent; or b) by administration of thrombolytic agents by pulse spray and/or continuous infusion; and c) including use of open thrombectomy, mechanical thrombectomy devices; and d) not including treatment of underlying pathology such as vessel stenosis or aneurysm. Including all associated angiography and fluoroscopy. (H) (Anaes.)	$2,000.00
PICO 36 – PICO pulmonary embolism acute	**New item – MBS item 12009IRE** Percutaneous catheter-directed treatment of symptomatic pulmonary embolism, involving thrombolytic infusion or mechanical removal of blood clot, if: a) the diagnosis is confirmed by an appropriate imaging modality such as computed tomography, magnetic resonance imaging or angiography; and b) the service is performed by a specialist or consultant physician with appropriate training	$3,000.00

PICO	Item descriptor	Fee
	Including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	

5 Arteriovenous (AVF)/malformation repair

PICO	Item descriptor	Fee
PICO 40 – Treatment of AV fistulae and AVMS	**New item – MBS item 5001AMR** Endovascular closure of arteriovenous fistulae or malformation, congenital or acquired (excluding surgically created AVF), if: a) the patient receives: i. administration of agents to occlude the vessel with the insertion of one or more covered stents; or ii. administration of agents to occlude blood vessel; or iii. insertion of one or more stents; and b) other than a service associated with a service to which item 35321 applies. Including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	$2,000.00
PICO 40.1	**New item – MBS item 5002AMR** Percutaneous needle closure of arteriovenous fistula or malformation, congenital or acquired (excluding surgically created AVF), if: a) the patient receives: i. administration of agents to occlude the vessel with the insertion of one or more covered stents; or	$1,000.00

PICO	Item descriptor	Fee
	ii. administration of agents to occlude blood vessel; or iii. insertion of one or more stents; and b) other than a service associated with a service to which item 35321 applies. Including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	

6 Dialysis access

PICO	Item descriptor	Fee
PICO 21 – Transluminal balloon angioplasty of arteriovenous fistula + thrombosed AV access interventions	**Amend item – MBS item 34518** Intervention for maturation or failing arteriovenous dialysis access (autologous or prosthetic) by open, endovascular or hybrid approach, Including all associated angiography and fluoroscopy (H) (Anaes.) (Assist.)	$1,500.00
PICO 21.1	**New item** Treatment of an acutely thrombosed AVF or AV graft for haemodialysis, by open, endovascular or hybrid approach, excluding a thrombosed venous catheter for dialysis, including administration of thrombolytic agents Including all associated angiography and fluoroscopy.	$1,800.00
PICO 21.2	**AMEND MBS item34509** Formation of an arteriovenous fistula or insertion of an arteriovenous access device for the purpose of haemodialysis, by open, endovascular or hybrid approach Including all associated angiography and fluoroscopy	$1,200.00

7 Embolisation

PICO	Item descriptor	Fee
PICO 39 – Gonadal vein embolisation	**New item – MBS item 8001EMB** Endovascular treatment of pelvic venous congestion or varicocele by administration of agents to occlude gonadal and pelvic veins, including all associated angiography and fluoroscopy. (H) (Anaes.)	$1,500.00

8 Ablation

PICO	Item descriptor	VIRWG proposed fee
Tumour ablation	**New item – MBS item 9001ABL** Tumour or hyperplastic tissue, destruction of, by open or laparoscopic ablation, where: a) the lesion has resulted in adverse clinical outcomes or growth has been documented on serial imaging or clinical assessment or if the case has been discussed in a multidisciplinary forum; or b) the diagnosis is suspected or confirmed by histology or appropriate imaging modality; and c) percutaneous access cannot be achieved. Including all associated angiography and fluoroscopy (H) (Anaes.) (Assist.)	$930.85 (TBC)
Tumour ablation	**New item – MBS item 9002ABL** Tumour or hyperplastic tissue, destruction of, by percutaneous ablation, where: a) the lesion has resulted in adverse clinical outcomes or growth has been documented on serial imaging or clinical assessment or if the case has been discussed in a multidisciplinary forum; or b) the diagnosis is suspected or confirmed by histology or appropriate imaging modality; and	$930.85 (TBC)

PICO	Item descriptor	VIRWG proposed fee
	c) the lesion is amenable to percutaneous ablation with the intent to cure or palliate. Including all associated angiography and fluoroscopy (H) (Anaes.) (Assist.)	

9 Miscellaneous vascular

Subcategory	PICO	Item descriptor	Fee
Not applicable	**PICO 5** – Endovascular removal of foreign body	**New item – MBS item 10001MVA** Removal of a foreign body, by open, endovascular or hybrid approach, including iatrogenic foreign bodies, confirmed by non-invasive imaging, when performed as an independent procedure. Including all associated angiography and fluoroscopy. (H) (Anaes.)	$1304.30
IVC filter insertion and removal	**PICO 11** – Reform of IVC filter numbers	**Amend item – MBS item 35330** Insertion of IVC filter by percutaneous, hybrid or open exposure approach, as an independent procedure. Including all associated angiography and fluoroscopy. (H) (Anaes.)	$1,000.00
	PICO 11.1	**Amend item – MBS item 35331** Retrieval of inferior vena caval filter by percutaneous, hybrid or open exposure approach, including all associated angiography and fluoroscopy. Other than a service to which item 10002MVA applies. (H) (Anaes.)	$1,000.00

Subcategory	PICO	Item descriptor	Fee
	PICO 11.2	**New item – MBS item 10002MVA** Retrieval of embedded, penetrating or thrombosed IVC filter by percutaneous, hybrid or open exposure approach. Including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	$3,000.00
	PICO 15 – Temporary balloon occlusion of a vessel for the purposes of effecting other endovascular treatments	**New item – MBS item 10003MVA** Temporary balloon occlusion of a vessel, for the purposes of effecting other when performed in conjunction with endovascular treatments.	$727.30
Ports and central venous access	**PICO 54** – Rationalisation of port insertion numbers	**New item – MBS item 10004MVA** Insertion of central venous catheter and access port or other chemotherapy delivery device, including all associated angiography and fluoroscopy. (H) (Anaes.)	$750.00
Vascular trauma	**PICO 61** – Vascular trauma and acute haemorrhage	**New item – MBS item 10006MVA delete MBS items 33815–33839** Emergency control of acute haemorrhage or false aneurysm from visceral or vascular trauma by open or endovascular approach, if: a) including either or both: i. administration of agents to occlude vessels; ii. the insertion of one or more covered stents (if required);	$3,500.00

Subcategory	PICO	Item descriptor	Fee
		iii. repair of damaged vessel by suture or, interposition graft; and b) not for insertion of a vessel closure device; and c) not in association with a service to which item 35321 applies. Including all associated angiography and fluoroscopy. (H) (Anaes) (Assist)	
	PICO 61.1	**New item – MBS item 10007MVA** Planned control of bleeding or false aneurysm from vascular damage, by endovascular or open approach, if: a) including either or both: i. administration of agents to occlude vessels; ii. the insertion of one or more covered stents (if required); and b) not for insertion of a vessel closure device. Including all associated angiography and fluoroscopy. (H) (Anaes) (Assist)	$2,500.00
	PICO 6 – Percutaneous catheterisation to perform embolisation of benign tissue growth, excluding associated radiological	**Amend item – MBS item 35321** Peripheral arterial or venous catheterisation to administer agents to occlude arteries, veins or arterio- venous fistulae or to arrest haemorrhage, by percutaneous or open exposure, if: a) for a patient requiring treatment of: i. vascular wall pathology (other than those described in any other item in Subgroup 6); or ii. end-organ pathology (other than those described in any other item in Subgroup 6); and b) not in association with: i. any other embolisation service; or	$3,000.00

Subcategory	PICO	Item descriptor	Fee
	services or preparation	ii. treatment of visceral or vascular trauma; or iii. treatment of varicose veins; or iv. a service associated with photodynamic therapy with verteporfin; and c) other than a service associated with a service to which items **12005IRE**, **12006IRE**, **12007IRE**, **12008IRE**, 300A52, 35406 or 35410 applies Including all associated imaging angiography and fluoroscopy. (H) (Anaes.) (Assist.)	

10 INR intervention

PICO	Item descriptor	Fee
PICO 31 – Intracranial aneurysm, rupture or unruptured, endovascular occlusion with detachable coils	**Amend item – MBS item 35412** Intracranial aneurysm, rupture or unruptured, endovascular occlusion with detachable coils, flow diversion stenting or intrasaccular devices. Including all associated services angiography and fluoroscopy. (H) (Anaes) (Assist)	$6,311.10
PICO 32 – Percutaneous cerebral venous stent insertion, 1 or more stents including associated balloon dilation	**New item – MBS item 11001INR** Percutaneous cerebral venous stent insertion, 1 or more stents for patients with idiopathic intracranial hypertension (IIH) including associated balloon dilatation. Including all associated angiography and fluoroscopy. (H) (Anaes) (Assist)	$1,880.00
PICO 64 – Embolisation of brain AVM as an	**New item – MBS item 11002INR** Transcatheter embolisation of brain AVM as an adjunct to open surgery or radiosurgery; or	$3,965.90

PICO	Item descriptor	Fee
adjunct to surgery or radiosurgery; embolisation of dural arteriovenous fistula or carotico-cavernous fistula	embolisation of cranial dural arteriovenous fistula or carotico-cavernous fistula with curative intent or to downgrade from a high-grade type to a low-grade type using any appropriate technique, where: a) the diagnosis is confirmed by angiography; and b) the service is performed by a specialist or consultant physician with appropriate training that is recognised by the Conjoint Committee for Recognition of Training in Interventional Neuroradiology For any particular patient – applicable once per presentation by the patient, regardless of the number of times embolisation is attempted during that presentation. Including all associated angiography and fluoroscopy. Claimable once per day. (H) (Anaes.) (Assist.)	
PICO 65 – Intracranial balloon angioplasty and stenting	**New item – MBS item 11003INR** Intracranial angioplasty or transluminal insertion of one or more stents: a) for a patient with: i. Documented recurrent symptoms of ischaemia, secondary to intracranial stenosis despite optimal medical therapy; or ii. acute ischaemic stroke, secondary to large vessel occlusion, where the diagnosis and underlying causative lesion is intracranial atherosclerosis, despite optimal medical therapy; and b) The diagnosis is confirmed by either: i. Computed tomography; or ii. Magnetic resonance imaging; or iii. previous angiography; and c) the service is performed by a specialist or consultant physician with appropriate training that is recognised by the Conjoint Committee for Recognition of Training in Interventional	$1,307.90

PICO	Item descriptor	Fee
	Neuroradiology; and d) including all angioplasty and stenting. Including all associated angiography and fluoroscopy. (H) (Anaes) (Assist)	
PICO 66 – Middle meningeal artery embolisation for chronic subdural haematoma, sphenopalatine or other nasal artery embolisation for epistaxis	**New item – MBS item 11004INR** Transarterial embolisation limited to the external carotid circulation (excluding dural arteriovenous fistulae), if: a) for the treatment of a patient with: i. one or more chronic subdural haematoma, with referral from a neurosurgeon; or ii. One or more durally-based tumours; or iii. Refractory epistaxis; and b) the service has been referred by a: i. specialist or consultant physician practising in their speciality of neurosurgery for chronic subdural haematoma or durally-based tumours; or ii. specialist or consultant physician practising in their speciality of ENT or head and neck surgery for refractory epistaxis; and c) the service is performed by a specialist or consultant physician with appropriate training that is recognised by the Conjoint Committee for Recognition of Training in Interventional Neuroradiology. Including all associated angiography and fluoroscopy. For any particular patient – applicable not more than once per presentation. (H) (Anaes.) (Assist.)	$3,500.00
PICO 67 – Treatment of	**New item – MBS item 11005INR**	$2,219.32

PICO	Item descriptor	Fee
intracranial cerebral vasospasm, by cervical or intracranial intraarterial chemical infusion	Treatment of intracranial cerebral vasospasm, by cervical or intracranial intraarterial chemical infusion. Including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	
PICO 68 – Treatment of intracranial cerebral vasospasm, by intracranial angioplasty of 1 or more intracranial vessels, with or without intraarterial chemical infusion	**New item – MBS item 11006INR** Treatment of intracranial cerebral vasospasm, by intracranial angioplasty of 1 or more intracranial vessels, with or without intraarterial chemical infusion. Including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	$2,428.87

11 IR (endovascular)

PICO	Item descriptor	Fee
PICO 8 – Endovascular insertion of fiducial markers	**New item – MBS item 12001IRE** Endovascular implantation of fiducial marker in one or more soft tissue organs for stereotactic treatment planning of lesion. Including all associated angiography and fluoroscopy. Not being a service associated with item 37217. (H) (Anaes.)	$2,000.00
PICO 29 – Fiducial marker percutaneous placement	**New item – MBS item 12002IRE** Percutaneous insertion of fiducial marker for stereotactic treatment planning of lesion, using interventional imaging techniques. Including all associated angiography and fluoroscopy.	$2,000.00

PICO	Item descriptor	Fee
	(H) (Anaes)	
PICO 10 – Portal Hypertension, porto-caval, meso-caval or selective spleno-renal shun	**New item – MBS item 12003IRE** Porto-systemic shunt, for the treatment of portal hypertension by open, endovascular or hybrid approach; if a) for the creation of a i. porto-caval shunt; or ii. meso-caval shunt; or iii. selective spleno-renal shunt; or iv. intrahepatic shunt. Including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	$3,800.00
PICO 20 – Transjugular liver or renal biopsy in patients unsuitable for percutaneous biopsy	**New item – MBS item 12004IRE** Endovascular core biopsy, liver or renal, for histological diagnosis of acute or chronic disease, if: a) percutaneous approach is not deemed feasible or has failed; and b) appropriate clinical documentation is retained as evidence for not using a percutaneous approach. (H) (Anaes.)	$1,500.00
PICO 34 – Malignant tumour treatment	**New item – MBS item 12005IRE** Embolisation of benign tumour Selective embolisation of benign tumour or hyperplastic tissue, performed under imaging guidance using catheter-directed delivery of therapeutic embolic agents, if: a) including uterine benign tumours that do not meet the requirements of item 35410; and	$3,500.00

PICO	Item descriptor	Fee
	b) The service does not include procedures where the primary target is the: i. vessel wall; or ii. vascular lumen; or iii. aneurysm; or iv. fistula; or v. arteriovenous malformation; and Including all associated imaging and catheterisation requirements integral to the procedure. (H) (Anaes.) (Assist.)	
PICO 34.1	**Amend item – MBS item 35410** Uterine artery embolisation Selective embolisation of uterine arteries, performed under imaging guidance using catheter-directed delivery of therapeutic embolic agents, for the treatment of: a) For a patient with symptomatic i. uterine fibroids; or ii. adenomyosis; or iii. endometriosis; or iv. heavy menstrual bleeding; or b) acute uterine haemorrhage; and c) Not in association with service to which item **12005IRE** applies Including all associated imaging and catheterisation requirements integral to the procedure. (H) (Anaes.) (Assist.)	$3,500.00

PICO	Item descriptor	Fee
PICO 34.2 – Embolisation of malignant tumour	**New item – MBS item 12006IRE** Selective embolisation of malignant tumour tissue, or administer chemotherapeutics, performed under image guidance with catheter-directed delivery of therapeutic embolic agents; if: a) Including transarterial chemoembolisation or bland embolisation (when the service is for embolisation); and b) The service does not include procedures where the primary target is the: i. vessel wall; or ii. vascular lumen; or iii. aneurysm; or iv. fistula; or v. arteriovenous malformation Including all associated imaging and catheterisation requirements integral to the procedure. (H) (Anaes.) (Assist.)	$3,500.00
PICO 34.3	**New item – MBS item 12007IRE** Embolisation of other end-organ pathology Selective embolisation of target tissue pathology performed under image guidance, if: a) the vascular system is used as a conduit for catheter-directed delivery of therapeutic embolic agents; and b) excluding procedures where the primary treatment target is the: i. vessel wall; or ii. vascular lumen; or iii. aneurysm, fistula; or	$3,500.00

PICO	Item descriptor	Fee
	iv. arteriovenous malformation; and c) Not in association with service to which item **12005IRE** applies including all associated imaging and catheterisation requirements integral to the procedure. (H) (Anaes.) (Assist.)	
PICO 34.4	**New item – MBS item 12008IRE** Embolisation of the lymphatic system Selective embolisation of abnormal lymphatic vessels, ducts or lymphatic leaks performed under image guidance, using catheter-directed or percutaneous techniques for delivery of embolic agents including all associated imaging and catheterisation requirements integral to the procedure. (H) (Anaes.) (Assist.)	$3,500.00
PICO 38 – Transarterial catheterisation of the hepatic artery to administer SIR-Spheres to embolise the microvasculature of hepatic masses which and are not suitable for resection or ablation, for selective internal radiation therapy	**Amend item – MBS item 35406** Transarterial catheterisation of the hepatic artery to administer radio-embolising agents to embolise the microvasculature of hepatic masses which are not suitable for resection or ablation, for selective internal radiation therapy which may be used in combination with systemic chemotherapy, if: a) treatment has been directed by a multidisciplinary team; and b) the diagnosis is suspected or confirmed by histology or appropriate imaging modality; and c) not being a service to which item 35317, 35319, 35320 or 35321 applies. Including all associated angiography and fluoroscopy. (H) (Anaes.) (Assist.)	$3,500.00
PICO 70 – Balloon pulmonary angioplasty	**New item – MBS item 12010IRE** Balloon pulmonary artery angioplasty, by endovascular approach, if: a) including either or both	$2432.37

PICO	Item descriptor	Fee
	i. restore pulmonary vasculature; ii. restore pulmonary vessel pressures; and b) must be recommended by a multidisciplinary team. Including all associated angiography and fluoroscopy. Claimable 6 times per year. (H) (Anaes.) (Assist.)	
PICO 74 – Venous sampling for evaluation of endocrine conditions with or without stimulation challenge	**New item – MBS item 12011IRE** Endovenous hormone sampling, of one or more veins, if: a) it is for the investigation of a patient who i. has known pathology of the target gland requiring localisation before treatment; or ii. has a confirmed mass of an endocrine organ and requires confirmation of active hormone production before treatment; and b) including microcatheterisation of the draining vein of i. parathyroid gland; or ii. pituitary gland; iii. gonadal gland; or iv. pancreatic gland; or v. renal; and c) including sampling pre- and post-administration of a hormone stimulating pharmaceutical; and d) samples taken of a distant vein as a control, if required; and e) referral by a specialist or consultant physician practising in the speciality of endocrinology or	$2,500.00

PICO	Item descriptor	Fee
	nephrology. Including all associated angiography and fluoroscopy. (H) (Anaes.)	
PICO 76 – Adrenal venous sampling	**New item – MBS item 12012IRE** Adrenal venous sampling (AVS), for investigation of a patient with hypertension, if: a) the patient is suspected or confirmed with: i. Primary aldosteronism; or ii. Autonomous cortisol secretion associated with bilateral adrenal nodules b) the patient is referred by an endocrinologist, nephrologist or internal medicine specialist; and c) the service is performed by a specialist or consultant physician practising in the specialist's or consultant physician's speciality of diagnostic radiology; and d) the specialist or consultant physician has undertaken appropriate training in the AVS procedure. Including all associated angiography and fluoroscopy. Applicable no more than twice in a patient's lifetime. If the procedure is unsuccessful, MBS item 30001 – for abandoned surgery – only can be claimed for the failed procedure. (H) (Anaes.)	$2,500.00
PICO 14 – Temperature or nerve monitoring during local ablation	**New item – MBS item 12013IRE** Percutaneous temperature or nerve monitoring during local ablation. Not in association with services to which items 39110, 39111, 39113, 39116, 39117, 39118, 39119, 11012, 11015, 11018 and 11021 apply. Excluding co-claims. Multiple Operations Rule (H)	$209.00

12 Percutaneous intervention (non-vascular)

PICO	Item descriptor	Fee
PICO 12 – Sclerotherapy for cystic lesion	**New item – MBS item 7001SCL** Percutaneous sclerotherapy for cystic lesion. Including all associated angiography and fluoroscopy. (H) (Anaes.)	$895.20
PICO 7 – Percutaneous cholangiopancreatoscopy	**Amend item – MBS item 30484** Endoscopic retrograde cholangiopancreatography or Percutaneous Transhepatic Cholangiography (PTC), other than a service to which items 30664, 30665, **13001PIN** or **13002PIN** apply. (H) (Anaes.) Note: Where clinically relevant, diagnostic services may be co-claimed with this item.	$425.75
PICO 7.1	**Amend item – MBS item 30664** Endoscopic retrograde cholangiopancreatography (ERCP), with single operator, single use peroral cholangiopancreatoscopy (POCPS) and biopsy, for the diagnosis of biliary strictures for a patient for whom: a) a previous ERCP or PTC service has been provided; and b) results from guided brush cytology or intraductal biopsy (or both) are indeterminate. Applicable not more than 2 times in a 12-month period, or not more than 3 times in a 12-month period if the patient has been diagnosed with primary sclerosing cholangitis (PSC). (H) (Anaes.) (Assist.) Note: Where clinically relevant, diagnostic services may be co-claimed with this item.	$682.95
PICO 7.2	**Amend item – MBS item 30665** Endoscopic retrograde cholangiopancreatography (ERCP), with single operator, single use peroral cholangiopancreatoscopy (POCPS) and electrohydraulic or laser lithotripsy for the removal of	$955.30

PICO	Item descriptor	Fee
	biliary stones that are: a) greater than 10mm in diameter; or b) proximal to a stricture; for a patient for whom there has been at least one failed attempt at removal via ERCP or PTC extraction techniques. Applicable not more than 2 times per treatment cycle. (H) (Anaes.) (Assist.) Note: Where clinically relevant, diagnostic services may be co-claimed with this item.	
PICO 7.3	**New item – MBS item 13001PIN** Percutaneous transhepatic cholangiography (PTC), and biopsy, with or without cholangioscopy, for the diagnosis of biliary strictures for a patient for whom: a) a previous ERCP or PTC service has been provided; and b) results from guided brush cytology or intraductal biopsy (or both) are indeterminate. Applicable not more than 2 times in a 12-month period, or not more than 3 times in a 12-month period if the patient has been diagnosed with primary sclerosing cholangitis (PSC). (H) (Anaes.) (Assist.) Note: Where clinically relevant, diagnostic services may be co-claimed with this item.	$682.95
PICO 7.4	**New item – MBS item 13002PIN** Percutaneous transhepatic cholangiography (PTC) with or without cholangioscopy, and electrohydraulic or laser lithotripsy for the removal of biliary stones that are: a) greater than 10mm in diameter; or b) proximal to a stricture; for a patient for whom there has been at least one failed attempt at removal via ERCP or PTC	$955.30

PICO	Item descriptor	Fee
	extraction techniques. Applicable not more than 2 times per treatment cycle. (H) (Anaes.) (Assist.) Note: Where clinically relevant, diagnostic services may be co-claimed with this item.	
PICO 75 – Radiologically inserted gastrostomy	**New item – MBS item 13003PIN (mirror existing item 30481)** Percutaneous radiologically inserted gastrostomy (RIG) (initial procedure), using interventional radiology techniques: a) excluding associated imaging; and b) excluding the insertion of a device for the purpose of facilitating weight loss. (H) (Anaes.) (Assist.)	$416.45
PICO 75.1	**New item – MBS item 13004PIN (mirror existing item 30482)** Percutaneous radiologically inserted gastrostomy (RIG) (repeat procedure), using interventional radiology techniques: a) excluding associated imaging; and b) excluding the insertion of a device for the purpose of facilitating weight loss. (H) (Anaes.) (Assist.)	$296.15

Consultation and feedback review process

Consultation with relevant and interested organisations, peak bodies and consumers is considered essential in the formulation of advice to government on recommended changes to MBS items. The MRAC and its working groups seek feedback on their understanding of the existing model of care and issues of consideration, with particular emphasis on any (yet) unidentified consequences that may result from proposed changes.

All feedback provided through consultation processes is considered.

Appendix 1: Medicare Benefits Schedule Continuous Review

The Medicare Benefits Schedule (MBS) is a list of health professional services (items) subsidised by the Australian Government for health consumers. MBS items provide patient benefits for a wide range of health services including consultations, diagnostic tests, therapies and operations.

The MBS Continuous Review builds on the work of the MBS Review Taskforce (the Taskforce). From 2015 to 2020, the Taskforce provided the first extensive, line-by-line review of the MBS since its inception in 1984.

In October 2020, the Australian Government committed to establishing a continuous review framework for the MBS, consistent with recommendations from the Taskforce Final Report.

Established in 2021, the MBS Continuous Review allows for ongoing rigorous and comprehensive reviews of Medicare items and services by experts, on a continuous basis, to ensure that the MBS works for patients and supports health professionals to provide high-quality care.

Medicare Benefits Schedule Review Advisory Committee

The MBS Continuous Review is supported by the MBS Review Advisory Committee (MRAC). The Committee's role is to provide independent clinical, professional and consumer advice to government on:

1. opportunities to improve patient outcomes in instances where a health technology assessment by the Medical Services Advisory Committee (MSAC) is not appropriate
2. the safety and efficacy of existing MBS items
3. implemented changes to the MBS, to monitor benefits and address unintended consequences.

The MRAC comprises practising clinicians, academics, health system experts and consumer representatives. The current MRAC membership is available on the Department of Health and Aged Care's MRAC webpage.

MBS Continuous Review Guiding Principles

The following principles guide the deliberations and recommendations of the MBS Continuous Review:

The MBS:

a) is structured to support coordinated care through the health system by

- recognising the central role of general practice in coordinating care
  - facilitating communication through general practice to enable holistic coordinated care
- is designed to provide sustainable, high-value, evidence-based and appropriate care to the Australian community
  - item descriptors and explanatory notes are designed to ensure clarity, consistency and appropriate use by health professionals

- promotes equity according to patient need
- ensures accountability to the patient and to the Australian community (taxpayer)
- is continuously evaluated and revised to provide high-value health care to the Australian community.

b) Service providers of the MBS:

- understand the purpose and requirements of the MBS
- utilise the MBS for evidence-based care
- ensure patients are informed of the benefits, risks and harms of services, and are engaged through shared decision-making
- utilise decision support tools, Patient Reported Outcome and Experience Measures where available and appropriate.

c) Consumers of the MBS:

- are encouraged to become partners in their own care to the extent they choose
- are encouraged to participate in MBS reviews so patient health care needs can be prioritised in design and implementation of MBS items.

The MRAC and its working groups recognise that general practice general practitioners are specialists in their own right. Usage of the term 'general practice', both within this report and in the MBS itself, does not imply that general practitioners are not specialists.

The MRAC notes that the MBS is one of several available approaches to funding health services. The MRAC and its working groups apply a whole-of-healthcare-system approach to its reviews.

Government consideration

If the Australian Government agrees to the implementation of recommendations, it will be communicated through government announcement.

Information will also be made available on Department of Health and Aged Care websites, including MBS Online and departmental newsletters.

Appendix 2: Additional guidance for PICO assessment

PICO	Additional guidance to be incorporated if relevant to the review question(s)
Patient (who is your patient/population)	Will there be a change to the patient **population**? For example, will new **populations** under the care of different health professionals access the service?
	Will the clinical management of the **population** change? Are there flow-on effects to other areas of the health system?
	How will the clinical management of the **population** change, including changes in health resource utilisation, or assignation to therapy?
	Will the process be more or less complex for the **patient**?
Intervention (what do you plan on doing for the patient?)	For proposed new providers, is there evidence to show they have sufficient training to **provide the service**, and/or is it within their recognised scope of practice? If not, consider: • What training or qualifications would be required to **perform the service**? • Can these be provided through an accredited training body?
	Are the existing and proposed **provider groups** considered comparable from their registration and training?
	For the proposed **new providers**, what MBS item/s are they requesting access to and how many new **providers** (approximately) are requesting access? Would the proposed **provider group** have access to the appropriate provider number to access Medicare benefits?
	Will the fee for service be the same for the new **provider group**? Justify why the same if they have a lower level of skill, or there is a change in time to perform the service.
	Will there be any changes in how the **service is provided**, such as preparation for the **service**, time taken to provide the **service**, etc.?
	For **diagnostic services**, how do the **requestors (providers)**

PICO	Additional guidance to be incorporated if relevant to the review question(s)
	use the information provided by the service in their practice?
	Which **providers** can currently request / refer the service? What training or qualifications do they possess, and would these be required for new requester/referrers?
	Is this change supported by current **providers**, the professional body and relevant stakeholders (e.g. relevant peak bodies and consumer groups)?
Comparator (what alternatives are you considering?)	What is the **comparator**? Is the **comparator** the MBS service currently provided by a different profession or is it the same/similar service provided by the proposed new provider via a non-MBS mechanism or something else?
	How does the health care resource use and costs for the proposed service **compare** with the **comparator**?
Outcome (what do you wish to accomplish?)	Will there be an impact on patient **outcomes** in terms of clinical effectiveness, safety or the quality of the service being provided? Can this be quantified?
	Is there a risk of adverse **outcomes**?
	What are the flow-on effects of the **change** including costs/offsets?
	Will there be a **change** in service utilisation? Consider: • Estimated number of services which would likely be provided by the proposed new provider or item number • Whether there would be increase in uptake of existing services, or a shift in services previously provided by a different provider • Whether there would be an increase or a reduction in total services, and can these changes be quantified. • Can utilisation be broken down by state, territory and rurality?

Appendix 3: Assessment of the proposed MBS item descriptor

When considering a proposed new or amended MBS item descriptor, members are encouraged to consider whether the item descriptor:

- addresses a deficiency, or deficiencies, in the current model of care
- improves patient outcomes compared with the current model of care
- reflects a high-quality evidence-based intervention with acceptable risk to benefit ratio
- addresses a discrete/well defined target population
- is applicable to a defined workforce/expertise

  promotes subsidiarity
- promotes triage according to need
- integrates with a GP coordinated model of care
- does not promote perverse incentives
- has a low potential for unintended consequences
- describes a complete service
- has measurable outcomes
- does not duplicate an existing item
- where relevant, triggers a review of any relevant MBS item(s)
- does not encourage cost shifting
- is easy to interpret and implement
- does not impose a large bureaucratic burden.

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