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| 1344Consultation protocol to guide the assessment of foot and ankle services by podiatric surgeons |
| March 2014  |

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# MSAC and PASC

The Medical Services Advisory Committee (MSAC) is an independent expert committee appointed by the Australian Government Health Minister to strengthen the role of evidence in health financing decisions in Australia. MSAC advises the Commonwealth Minister for Health on the evidence relating to the safety, effectiveness, and cost-effectiveness of new and existing medical technologies and procedures and under what circumstances public funding should be supported.

The Protocol Advisory Sub-Committee (PASC) is a standing sub-committee of MSAC. Its primary objective is the determination of protocols to guide clinical and economic assessments of medical interventions proposed for public funding.

## Purpose of this document

This document is intended to provide a draft decision analytic protocol that will be used to guide the assessment of an intervention for a particular population of patients. The draft protocol will be finalised after inviting relevant stakeholders to provide input to the protocol. The final protocol will provide the basis for the assessment of the intervention.

The protocol guiding the assessment of the health intervention has been developed using the widely accepted “PICO” approach. The PICO approach involves a clear articulation of the following aspects of the research question that the assessment is intended to answer:

**P**atients – specification of the characteristics of the patients in whom the intervention is to be considered for use;

**I**ntervention – specification of the proposed intervention

**C**omparator – specification of the therapy most likely to be replaced by the proposed intervention

**O**utcomes – specification of the health outcomes and the healthcare resources likely to be affected by the introduction of the proposed intervention

# Purpose of application

A proposal for an application requesting access by podiatric surgeons to MBS listings of surgical treatments for the foot and ankle was received from The Australian College of Podiatric Surgeons by the Department of Health and Ageing in December 2012. The applicant has stated that there is an increasing need for efficient provision of foot and ankle services within the Australian health system due to the ageing of the population, reflected in an increased number of claims of relevant MBS items (Menz et al 2008). Part of the rationale for this is that foot conditions worsen over time and may also be associated with chronic conditions such as diabetes that are increasing in prevalence as the population ages ([Menz et al 2008](#_ENREF_8)). The applicant also states that there has been a growth in the understanding that correcting foot problems is important to overall health maintenance ([Bennett et al 1998](#_ENREF_5)).

# Background

This application raises policy issues regarding access to MBS items by Allied Health Professionals and in a broader context the accreditation/credentialing of professionals providing a service and their scope of practice. The development of this protocol is likely to require the input of policy experts. This protocol acknowledges that this proposal raises a range of issues including legislative issues; however, this document focuses on questions that can be tested in an evidence-based manner.

The primary question identified by this process is: is foot and ankle surgery performed by podiatric surgeons at least as safe and effective as foot and ankle surgery performed by orthopaedic surgeons (including pre- and post-operative patient management)? Broadly the proposal requests MBS reimbursement of services which the applicant claims that podiatric surgeons already provide. There is no change requested regarding the type of service available on the MBS, nor to any item descriptors.

The main change in terms of the proposal is to enable access to Medicare benefits when the types of treatment are performed by a podiatric surgeon. A secondary change will be that the identified non-hospital treatment would no longer be eligible for private health insurance if covered by the MBS. The impact of this proposal on the cost to patients and the MBS should be investigated at the assessment phase.

**Scope of application**

PASC agreed that the Protocol should include an exhaustive and specific list of conditions requested by this application to enable an assessment of relevant evidence. The list of conditions should specify any exclusions if the condition is broad. At this stage, this list has not been provided. However, the applicant has provided the Australasian College of Podiatric Surgeons Policy on Credentialing of Podiatric Surgeons and the college Fellowship Training Handbook. These documents may be used to inform the full list of conditions requested in the application.

The applicant has stated that the College will provide data and resources regarding the patterns of referrals made to Podiatric surgeons and their origin in the submission to MSAC. Key questions raised throughout the protocol are also summarised at the end of this document.

## Current arrangements for public reimbursement

The interventions specified in the application are currently reimbursed on the MBS for Medicare eligible medical practitioners. An initial review of MBS data utilisation suggests that the services specified are currently mainly provided by orthopaedic surgeons, general surgeons and general practitioners (GPs) in public and private hospitals and outpatient settings. Podiatric surgeons also provide surgical services to patients with foot and ankle pathologies, although they do not have provider access to relevant MBS items.

**The MBS** (see also regulatory status)

Podiatric surgeons do not currently have access to MBS items for surgical treatment of the foot and ankle. Medicare does not provide a benefit towards a podiatric surgeon’s fee or those of an associated anaesthetist.

**Relevant legislation**

Under the *Private Health Insurance Act 2007* (the PHI Act)*,* private health insurers are required to cover the costs of approved prostheses associated with services of accredited podiatric surgeons for hospital treatment that is covered under a complying health insurance policy.

Under the *Health Insurance (HI) Act 1973 a 75% MBS benefit is payable for hospital treatment.* Section 3 of the HI Act sets out that hospital treatment has the meaning given by section 121-5 of the PHI Act*.* It, in turn, defines the types of treatment that may be hospital treatment. These include podiatric surgical services.

Accredited podiatrists for PHI purposes are those who hold specialist registration with the Podiatry Board of the Australian Health Practitioner Regulation Agency (AHPRA) under the National Law. The Act does not require private health insurers to pay a benefit towards the podiatric surgeon’s or anaesthetists services. The applicant notes that fewer than 10 out of approximately 540 private hospitals in Australia have granted podiatric surgeons admitting rights. Podiatric surgery services provided out of hospital are commonly funded through PHI general treatment cover. *Data on private health insurance utilisation for podiatric surgery services may be available from the Private Health Insurance Administration Council (PHIAC) through the Department. This data may be considered at the assessment phase. PASC notes that making out-of-hospital services eligible for Medicare funding will mean that they can no longer be covered by PHI. This may increase the costs for some patients. The impact of this proposal on the costs to patients should be considered in the assessment phase.*

# Intervention

## Description

Surgical treatments for conditions of the foot and ankle are diverse. They consist of a range of interventions from removal of an ingrown toenail which may be performed in consulting rooms, to more complex procedures requiring inpatient services.

The scope of the intervention in terms of the specific conditions treated, any exclusion (where the condition is broad) and the procedures practiced by podiatric surgeons for the purposes of an evidence based assessment is still in the process of being defined. PASC has requested that the applicant provide an exhaustive and specific list of conditions requested; some information has been provided but a full and exhaustive list was not available for the preparation of this protocol. The applicant suggested that a complete list of conditions and associated MBS items (see Table 1) will be provided in the assessment report.

The applicant has confirmed that ankle replacement and removal of malignant tumours are not included within this submission.

The applicant also confirmed that the requested items would reflect both in-hospital and out-of-hospital services, and that the location of treatment would be consistent with clinical requirements. PASC noted that a day surgery unit is classified as in-hospital for Medicare purposes.

Intervention: The intervention is surgical treatments for conditions of the foot and ankle provided by podiatric surgeons. Podiatric surgeons are podiatrists who have completed specialised postgraduate training in podiatric medicine and surgery. They may use both surgical and non-surgical procedures to treat conditions of the foot and ankle which include but are not limited to:

* Structural deformities, including bunions, hammertoes, painful flat foot and high arch deformity, bone spurs;
* Heel pain;
* Nerve entrapments;
* Degeneration and arthrosis of joints;
* Skin and nail conditions;
* Congenital deformities; and
* Trauma-related injuries, including fractures and dislocations ([Australian & New Zealand Podiatry Accreditation Council Inc. 2012](#_ENREF_3)).

Podiatric surgeons are seeking access to 40 MBS items (see Appendix A), the scope of which includes:

* 35 surgical MBS items to treat hallux valgus, hammer and claw toes, hindfoot/ankle pathology, ingrown toenails, hallux rigidus, heel pain, nerve impingement and tumour;
* 1 MBS item for administration of anaesthesia (18272);
* 2 specialist consultation items (104, 105); and
* 2 items for assistance for surgical procedures (fee < $558.30).

Some of the item numbers cover procedures explicitly restricted to the foot and ankle region, others cover more general excisional procedures (e.g. 31350) and some further items cover orthopaedic devices such as pins or wires. Single items may have applications for a range of indications such as item 47726 used for bone grafts. The applicant indicates that this item could be used to treat hindfoot or ankle pathologies, hammertoe, hallux valgus and hallux rigidus. The applicant has provided a list of MBS item numbers mapped to conditions. This is shown below (Table 1). This is not an exhaustive list of all services provided by Podiatric surgeons. The full item descriptor for each MBS item can be found in Appendix A. The applicant also notes that this table is not final. This application also encompasses items 50118 (subtalar joint, arthrodesis of) and 30186 (palmar or plantar warts (less than 10), definitive removal of) which are not included in Table 1 as well as two items for professional attendance (104, 105) and two items for surgical assistance (51303, 51300).

Note that some MBS items included in the ACPS Policy document, Credentialing of Podiatric Surgeons, have not been included in Table 1 and are currently outside the scope of this submission. The current list represented in Table 1 represents all known conditions being requested, but additional conditions may be specified during the assessment. These additional conditions will be identified from relevant documents (e.g. the ACPS training manual) provided by the applicant.

Table 1 MBS items requested mapped to conditions (provided by the applicant)

| **MBS item number** | **Description of condition/service provided by podiatric surgeons**  |
| --- | --- |
|  | **Hallux Abducto Valgus** |
| 48400 | Deformity of phalanx, metatarsal, accessory bone or sesamoid bone.  |
| 49833 | Hallux varus or hallux valgus acquired - unilateral. |
| 49836 | Hallux varus or hallux valgus acquired - bilateral. |
| 49845 | Hallux valgus, varus, 1st metatarsal/phalangeal joint arthritis, osteomyelitis, osteonecrosis. |
| 47927 | Buried pin or wire, 1 or more of, which were inserted for internal fixation purposes, removal of requiring incision and suture  |
| 47726 | Bone graft, harvesting of, via separate incision, in conjunction with another service - autogenous - small quantity  |
| 31350 | Benign deep soft tissue tumour requiring lesional or marginal excision of |
| 30241 | Benign bone tumour requiring lesional or marginal excision of |
| - | **Hammer toes** |
| 49848 | Claw or hammer toe.  |
| 49851 | Claw or hammer toe requiring internal fixation for correction.  |
| 48400 | Deformity of phalanx, metatarsal, accessory bone or sesamoid bone.  |
| 48403 | Deformity of phalanx or metatarsal requiring osteotomy or osteectomy with internal fixation for correction, and excluding services to which items 47933 or 47936 apply  |
| 49809 | Deformity of tendon requiring open tenotomy of, with or without tenoplasty  |
| 49806 | Deformity of tendon requiring, subcutaneous tenotomy of, 1 or more tendons  |
| 47927 | Pin or wire, 1 or more of, which were inserted for internal fixation purposes, removal of requiring incision and suture, not being a service to which item 47927 or 47930 applies - per bone  |
| 50103 | Joint pathology requiring, arthrotomy of, not being a service to which another item in this Group applies  |
| 50127 | Buried pin or wire, 1 or more of, which were inserted for internal fixation purposes, removal of requiring incision and suture  |
| 47726 | Bone graft, harvesting of, via separate incision, in conjunction with another service - autogenous - small quantity  |
| 31350 | Benign deep soft tissue tumour requiring lesional or marginal excision of |
| 30241 | Benign bone tumour requiring lesional or marginal excision of |
|  | **Ankle and hindfoot** |
| 47933 | Exostoses -small requiring removal |
| 47936 | Exostoses -large requiring removal |
| 50333 | Tarsal coalition requiring excision of, with interposition of muscle, fat graft or similar graft  |
| 49815 | Foot deformity requiring, triple arthrodesis of, with synovectomy if performed  |
| 48406 | Deformity of fibular or tarsus requiring osteotomy or osteectomy of, excluding services to which items 47933 or 47936 apply  |
| 48409 | Deformity of fibular or tarsus requiring osteotomy or osteectomy of, with internal fixation, and excluding services to which items 47933 or 47936 apply  |
| 49854 | Plantar fibroma or other soft tissue lesion requiring radical plantar fasciotomy or fasciectomy of  |
| 50127 | Deformity of joint or joints arthroplasty of, by any technique not being a service to which another item applies  |
| 50102 | Pathology of joint requiring arthroscopic surgery of, not being a service to which another item in this Group applies  |
| 50103 | Joint pathology requiring arthrotomy of, not being a service to which another item in this Group applies  |
| 50109 | Joint pathology requiring arthrodesis of, not being a service to which another item in this Group applies, with synovectomy if performed  |
| 49806 | Tendon pathology requiring subcutaneous tenotomy of, 1 or more tendons  |
| 49809 | Tendon pathology requiring open tenotomy of, with or without tenoplasty  |
| 47927 | Pin or wire, 1 or more of, which were inserted for internal fixation purposes, removal of, in the operating theatre of a hospital - per bone  |
| 47930 | Pin or wire,1 or more of, which were inserted for internal fixation purposes, removal of requiring incision and suture, not being a service to which item 47927 or 47930 applies - per bone  |
| 47954 | Tendon pathology requiring, repair of, as an independent procedure  |
| 47957 | Tendon pathology, large, lengthening of, as an independent procedure  |
| 47921 | Pin or wire, insertion of, as an independent procedure  |
| 30226 | Muscle pathology requiring, excision of, or fasciotomy  |
| 47726 | Bone graft, harvesting of, via separate incision, in conjunction with another service - autogenous - small quantity  |
| 30107 | Ganglion or small bursa requiring, excision of, not being a service associated with a service to which another item in this Group applies  |
| 31350 | Benign deep soft tissue tumour requiring lesional or marginal excision of |
| 30241 | Benign bone tumour requiring lesional or marginal excision of |
| 18272 | Saphenous, Sural, Popliteal or posterior tibial nerve, main trunk of, 1 or more of, injection of an anaesthetic agent  |
|  | **Ingrown toenail** |
| 47915 | Ingrown toe nail requiring, wedge resection for, with removal of segment of nail, ungual fold and portion of the nail bed  |
| 47918 | Ingrown toe nail requiring, radical excision of nailbed  |
| 47933 | Exostoses -small |
| 31350 | Benign deep soft tissue tumour requiring lesional or marginal excision of |
| 30241 | Benign bone tumour requiring lesional or marginal excision of |
|  | **Hallux rigidus** |
| 48400 | Deformity of phalanx, metatarsal, accessory bone or sesamoid bone.  |
| 48403 | Deformity of phalanx or metatarsal requiring osteotomy or osteectomy with internal fixation for correction, and excluding services to which items 47933 or 47936 apply  |
| 49833 | Hallux rigidus requiring, correction of hallux valgus by osteotomy of first metatarsal with or without internal fixation and with or without excision of exostoses associated with the first metatarsophalangeal joint - unilateral. |
| 49836 | Hallux rigidus requiring, correction of hallux valgus by osteotomy of first metatarsal with or without internal fixation and with or without excision of exostoses associated with the first metatarsophalangeal joint - bilateral. |
| 49845 | Hallux rigidus requiring, arthrodesis of, first metatarso-phalangeal joint, with synovectomy if performed  |
| 47927 | Buried wire, pin or screw, 1 or more of, which were inserted for internal fixation purposes, removal of requiring incision and suture, not being a service to which item 47927 or 47930 applies - per bone  |
| 47726 | Bone graft, harvesting of, via separate incision, in conjunction with another service - autogenous - small quantity  |
| 31350 | Benign deep soft tissue tumour requiring lesional or marginal excision of |
| 30241 | Benign bone tumour requiring lesional or marginal excision of |
| 47933 | Multiple Exostoses -small |
| 47936 | Multiple Exostoses -large |
| 50127 | Joint or joints requiring, arthroplasty of, by any technique not being a service to which another item applies  |
| 50103 | Joint pathology requiring, arthrotomy of, not being a service to which another item in this Group applies  |
| 49806 | Tendon pathology requiring, subcutaneous tenotomy of, 1 or more tendons  |
| 49809 | Tendon pathology requiring, open tenotomy of, with or without tenoplasty  |
| 47930 | Buried wire, pin or screw, 1 or more of, which were inserted for internal fixation purposes, removal of requiring incision and suture, not being a service to which item 47927 or 47930 applies - per bone  |
|  | **Heel pain** |
| 47933 | Multiple Exostoses - small |
| 47936 | Multiple Exostoses - large  |
| 49854 | Plantar fibroma or other soft tissue lesion requiring radical plantar fasciotomy or fasciectomy of  |
| 47954 | Tendon pathology requiring, repair of, as an independent procedure  |
| 47957 | Tendon, large, requiring lengthening of, as an independent procedure  |
| 30107 | Ganglion or small bursa requiring excision of, not being a service associated with a service to which another item in this Group applies  |
| 49809 | Tendon pathology requiring, open tenotomy of, with or without tenoplasty  |
| 49806 | Tendon pathology requiring, subcutaneous tenotomy of, 1 or more tendons  |
| 50103 | Joint pathology requiring, arthrotomy of, not being a service to which another item in this Group applies  |
| 47921 | Pin or wire , insertion of, as an independent procedure  |
| 50203 | Bone or deep soft tissue tumour, lesional or marginal excision of  |
|  | **Nerve** |
| 49866 | Morton's or Bett's syndrome requiring neurectomy. |
| 39330 | Nerve pathology requiring open operation without transposition, not being a service associated with a service to which item 39312 applies  |
|  | **Tumour** |
| 31350 | Benign deep soft tissue tumour requiring lesional or marginal excision of |
| 30241 | Benign bone tumour requiring lesional or marginal excision of |
| 47933 | Multiple Exostoses -small |
| 47936 | Multiple Exostoses -large |
| 30107 | Ganglion or small bursa requiring excision of, not being a service associated with a service to which another item in this Group applies  |

Current MBS item descriptors are provided in Appendix A. Of the items requested, item 47915 for the treatment of ingrown toenail is the most frequently claimed. Other frequently claimed items such 47927, 18272, 48403, 47930 and 48400 are item numbers for internal fixation purposes, injection of anaesthesia and bone osteotomy or osteoectomy. *The assessment should include utilisation data by specialty group to understand which medical professions are currently providing these Medicare funded services.*

Data recorded by Fellows of the ACPS (March 2011 to February 2012) recorded 1,900 cases treated by Podiatric surgeons. Of these cases hallux valgus, hammertoe and ingrown toenail were all frequent conditions treated by Podiatric surgeons. The applicant also notes that day surgery comprises the majority of admissions. The average length of stay for the entire 2011/12 data set was one day and almost all inpatient admissions were for one night.

**Brief description of selected conditions of the foot and ankle**

Conditions of the foot and ankle are varied, as are their aetiologies. Foot and ankle problems can arise as the result of trauma, anatomical disorders, congenital deformities, the effects of chronic disease and degenerative processes.

Because the aetiology of foot and ankle disorders are many there is limited information regarding the incidence of foot and ankle problems. A longitudinal cohort study undertaken in South Australia ([Hill et al 2008](#_ENREF_7)) found that foot pain was prevalent amongst 17.4 per cent of participants (95% confidence interval 16.2-18.8). Factors associated with a statistically significant increase in the likelihood of reporting foot pain included:

* Female sex
* Age 50 years or over
* Classified as obese
* Also reporting knee, hip and back pain

The study also showed an increased prevalence of foot pain amongst persons with diabetes, cardiovascular disease and osteoporosis. These associations were not found to be statistically significant.

The bones of the foot are depicted below (Figure 1).



Figure 1 Bones of the foot (http://www.britannica.com/EBchecked/media/101314/Bones-of-the-foot-showing-the-calcaneus-talus-and-other)

The applicant claims that podiatric surgery emphasises immediate mobility as their “first best outcome” and is therefore typically more conservative than current orthopaedic practice. The applicant claims that international evidence suggests that this leads to better patient outcomes, both in direct recovery from surgery, and in associated benefits, including cardio-vascular improvements. *The assessment should identify the clinical pathway and treatment for the relevant conditions and identify if treatment by podiatric surgeons are at the same line of treatment as the comparator identified by the applicant (e.g. orthopaedic surgeons).*

The following list of conditions and treatments reflect the services and details provided in the clinical algorithms specified by the applicant. The applicant indicates that surgical treatment of the condition is generally reserved for patients who are refractive to non-surgical management, where the pathology has progressed to an advanced stage or when the patient is experiencing significant pain, limitation to mobility or deformity. The applicant has provided clinical management algorithms pertaining to relevant conditions; for brevity these are not included in the protocol but will be relevant at the assessment phase.

The applicant states that patients with foot or ankle pathologies will be referred to a podiatric surgeon by their GP or Medical Specialist. The Podiatric surgeon will conduct an assessment and develop a care plan for the patient that may involve further non-surgical care (directly or with further referral) or surgical procedures.

**Hallux valgus** (bunion)

This condition is the deviation inward of the first metatarsal and lateral deviation and/or rotation of the hallux (big toe). This may be associated with soft-tissue enlargement of the first metatarsal and can result in painful motion of the joint ([Frank 2012](#_ENREF_6)).

The nature of the deformity is assessed radiographically. Radiographic imaging and clinical findings are used to classify the severity of hallux valgus. Radiographic imaging is essential in pre-operative planning. The choice of surgical treatment will vary depending on the nature of the deformity and the needs of the patient. Surgical treatments indicated in patients refractive to non-surgical management, as nominated by the applicant, include:

* joint preserving operations including osteotomy with internal fixation and soft tissue correction around the joint;
* arthroplasty with or without prosthetic implant; and
* joint arthrodesis.

These treatments are used to correct the position of the hallux and restore functionality to the toe joint. The post-operative care for most hallux valgus corrective surgery episodes involves rest and partial weight bearing in a post-operative shoe for 2-6 weeks. In some cases a period of approximately 4-6 weeks of non-weight bearing with crutches assistance is required.

Relevant MBS items nominated by the applicant are shown in Table 1.

**Hammer and claw toes**

Hammer and claw toes are toes that do not have the right shape. The ligaments and tendons controlling the position of the toes become contracted and cause the toe(s) to bend into an odd position at one or more joints ([WebMD 2013](#_ENREF_12)). This condition can cause joint pain, development of pressure lesions, ulceration and limit mobility.

Clinical findings and imaging studies, such as plain film x-ray and ultrasound investigation, are necessary to classify the severity of deformity and are essential for pre-operative planning. Surgical treatments indicated in patients refractive to non-surgical management, as nominated by the applicant, include:

* osteotomy to realign or reduce pressure;
* ostectomy to reduce pressure; and
* joint arthroplasty or arthrodesis to reduce deformity and pressure in severe cases.

The procedures are reconstructive and may require either permanent or temporary prosthesis to maintain the corrected position. The post-operative care for lesser digital and tailor bunion corrective surgery episodes involves rest and partial weight bearing in a post-operative shoe for 2-6 weeks.

Relevant MBS items nominated by the applicant are shown in Table 1. A combination of item numbers may be required where multiple joints are affected or prosthesis is required.

**Hindfoot/ankle pathology**

These include conditions such as ankle arthritis, subtalar joint arthritis, tarsal coalition, chronic ankle instability and osteochondritis dessicans, ankle impingement syndromes and adult acquired flat foot. The applicant states that hypermobile symptomatic flat foot or rigid cavus foot are causes of common hindfoot and ankle disability. Pain, instability and secondary effects on the lower limbs may result.

Radiographic imaging and clinical findings are used to classify the severity of the condition. Radiographic imaging is essential in pre-operative planning. Surgical treatments indicated in patients refractive to non-surgical management, as nominated by the applicant, include:

* osteotomy;
* arthroplasty;
* arthrodesis;
* bone grafting; and
* management of benign soft tissue and bone tumours.

Following major ankle procedures such as arthrodesis patients use crutches or a wheelchair and mobilise without bearing any weight on the operated leg for 6-8 weeks. During this time patients are in a cast or cast boot. At 10-12 weeks patients may begin walking in a shoe with a supportive ankle brace. A slow gradual increase in weight bearing activity is encouraged. It is often 12-18 months before patients experience maximal improvement.

Relevant MBS items nominated by the applicant are shown in Table 1.

**Ingrown toenails**

Ingrown toenails are the result of compression of the nail bed causing the nail to penetrate the cuticle. Patients may present with pain, swelling and infection of the toe. Surgical intervention is usually considered when tissue forms over the infection and can no longer be lifted off the nail edge. Surgical treatment may consist of partial or total removal of the nail plate ([Schraga 2012](#_ENREF_11)). Lesions, such as osteochondromata, can be associated with ingrown toenails. The growths vary in size and can cause nail deformity, pain and infection. Medical imaging studies such as x-rays are required to assess the severity of the lesion.

Podiatric surgeons closely monitor patients post operatively to reduce the risk of complications and for continued patient education on wound management. Healing is expected between 3 and 12 weeks depending on the procedure performed.

The applicant indicates that surgery may also be required to underlying bone and soft tissue. Relevant MBS items nominated by the applicant are shown in Table 1.

**Hallux rigidus**

The condition encompasses mild to severe degenerative arthritis of the first metatarsophalangeal joint. The condition results in a loss of articular cartilage that causes pain with mobility restriction and lower limb pain syndromes. Radiographic imaging and clinical findings are used to classify the severity of hallux rigidus. Radiographic imaging is essential in pre-operative planning.

The applicant states that early interventions include reconstructive procedures whilst end-stage pathology requires joint arthroplasty or arthrodesis. The vast majority of cases can be treated with cheilectomy, arthrodesis, or interposition (soft tissue) arthroplasty often in combination with an osteotomy. Simple resection arthroplasty (removal of the base of the proximal phalanx) although not broadly used is still appropriate in certain clinical circumstances. The applicant also states that management of soft tissue tumours and bone tumours may also be required.

The post-operative care for most hallux rigidus corrective surgery episodes involves rest and partial weight bearing in a post-operative shoe for 2-6 weeks. The full recovery time to allow for soft tissue remodelling and gait rehabilitation can be between 12 and 18 months after surgery.

Relevant MBS items nominated by the applicant are shown in Table 1.

**Heel pain**

Plantar fasciosis and heel spur syndrome are conditions where there is persistent pain associated with chronic degenerative and reparative processes affecting the origin of the plantar fascia and surrounding peri-fascial surfaces. Heel pain can also be neurologic as a result of irritation or entrapment of nerves, due to arthritis, due to trauma or occasionally due to tumours.

Diagnosis and imaging includes x-ray, ultrasound and, depending upon presentation, MRI. Surgical treatments indicated in patients refractive to non-surgical management, as nominated by the applicant, include plantar fasciotomy, bone spur removal and tarsal tunnel decompression. Patients are required to wear some form of immobilisation device following the procedure and post-operative review takes place periodically. The management of soft tissue and bone tumours may also be required.

Relevant MBS items nominated by the applicant are shown in Table 1.

**Nerve impingement**

Peripheral nerves may become compressed or injured in the foot or ankle due to trauma, footwear or mechanical imbalance and reduce health- related quality of life. Common pathologies include Morton’s neuroma and tarsal tunnel syndrome.

Diagnosis is usually made by thorough history taking and clinical examination, but is assisted by ultrasonography and magnetic resonance imaging.

The applicant states that in patients refractive to conservative therapy and injection therapy the surgical release of the entrapped nerve with or without removal of damaged nerves may be required. Surgical management options for Morton’s neuroma include either nerve decompression (neurolysis) or excision (neurectomy). In cases of tarsal tunnel syndrome early decompression (neurolysis) is recommended in order to relieve pain and prevent permanent nerve fibrosis. The post-operative care for most foot and ankle nerve impingement surgery involves rest and partial weight bearing in a post-operative shoe for 2 to 3 weeks.

Relevant MBS items nominated by the applicant are shown in Table 1.

**Tumour**

Soft tissue and bone tumours of the foot and ankle may cause pain and disability and may occasionally be malignant. Tumours of the skin, tendons, capsule, nerves, blood vessels, synovium, periosteum and bone do present to foot and ankle surgeons for management. Preoperative diagnostic and staging studies require the use of X-rays, diagnostic ultrasound, bone scans, computed tomography and magnetic resonance imaging.

Tumours require removal as a biopsy or excisional procedure. When foot and ankle tumours are excised, adjunctive and reconstructive surgery may be required. Such adjunctive procedures can include ostectomy, osteotomy, arthroplasty, arthrodesis, soft tissue and bone grafting. Referral to other surgical specialities, such as plastic and orthopaedic surgeons, in addition to oncologists is indicated where initial histopathology provides evidence of metastatic disease. The post-operative care for most foot and ankle tumour surgery involves rest and partial weight bearing in a post-operative shoe for 2-6 weeks.

 Relevant MBS items nominated by the applicant are shown in Table 1.

The applicant has provided the following statement regarding the management of tumours by Podiatric surgeons:

If, during the course of a procedure, abnormal tissue is observed the tissue is routinely resected and sent for histopathologic examination. In this situation, appropriate referral to specialist services in oncology both surgical and medical in collaboration with the patient's general practitioner is performed as soon as is practicable.

No procedure is performed on known malignancies by Podiatric surgeons outside of collaborative arrangements with other such specialty services. For the purpose of clarity in reference to the MSAC application, a Medicare referral for surgical services to remove known malignancies is not requested at this time.

## Administration, dose, frequency of administration, duration of treatment

Conditions of the foot and ankle are treated according to their aetiology and the degree of functional impairment associated with their presentation. In many instances patients may be treated with non-surgical interventions such as the prescription of orthotics, medicines or physiotherapeutic interventions; however, severe or long-standing conditions may necessitate surgical intervention ([Menz et al 2008](#_ENREF_8)).

Currently orthopaedic surgeons are the primary providers of surgical procedures on the foot and ankle. However, other medical professions (e.g. GPs, general surgeons) also provide these services depending on the severity of the condition. *The assessment should include data on utilisation of the relevant MBS items by specialty group to enable identification of the most appropriate comparator medical profession groups.*

Registered podiatric surgeons may also provide surgical treatments of foot and ankle conditions. The applicant is seeking access by podiatric surgeons to a range of MBS items for therapeutic surgical procedures and consultation medical services.

The applicant estimates approximately 3,000 patients per year would utilise podiatric surgeon services if it was publicly funded. This estimate is based on the ACPS 2011/12 audit count of 1,900 cases and the expected workforce outcomes for 2014. *The applicant has stated that up-to-date audit data shall be available for the assessment report. The assessment report should include an estimate of the number of claims per year for the requested MBS items and the subsequent flow on cost to the MBS.*

The applicant expects there to be no additional growth in the number of patients utilising foot and ankle surgery services as a result of this application. The applicant expects the number of services will be substituted between providers. *The assessment should gather evidence to test this assumption i.e. will Medicare funded foot and ankle surgery services change if this application is approved. What will be the cost impact to Medicare, PHI and consumer?*

Proposed provider:

Currently a referral is not required to see a podiatric surgeon, although patients would generally be referred by another health professional. In order to access MBS items relating to the surgical treatment of foot and ankle conditions patients would require a referral. The applicant indicates that patients will be referred by GPs or medical specialists. Podiatrists are not considered referrers for the purposes of Medicare.

*The Applicant has suggested that a survey of members will be able to provide information regarding the referrals to podiatric surgeons from Medical Practitioners (e.g. general practitioner, orthopaedic surgeon), and that this would be available for the assessment report.*

Podiatric surgeons are also seeking access to consultation item number 104, the “professional attendance at consulting rooms or hospital by a specialist in the practice of his or her specialty where the patient is referred to him or her” as well as item number 105 which covers the subsequent attendance in a single course of treatment.

## Regulatory status

Registered podiatric surgeons are registered by the Podiatric Board supported by the Australian Health Practitioner Regulation Agency (AHPRA).

To achieve specialist recognition by the Podiatric Board a person must hold either a:

* Fellowship or eligibility for Fellowship of the Australasian College of Podiatric Surgeons (ACPS) or
* Doctor of Clinical Podiatry, University of Western Australia.

The Australasian College of Podiatric Surgeons and its training program are accredited by the Australian and New Zealand Podiatry Accreditation Council.

Podiatric surgeons must first gain general registration as podiatrists with the Podiatry Board of Australia. Fellowship of the ACPS is granted after the successful completion of an ACPS training program. Prerequisites for admission into the ACPS training program include, but are not limited to:

* an accredited degree in podiatry;
* minimum of 2 years of postgraduate clinical practice; and
* completion of an approved master’s degree.

There are currently 26 registered podiatric Surgeons in Australia (as of June 2013 - [Podiatry Board of Australia 2013b](#_ENREF_10)).

Proposed setting

Podiatric surgeons currently conduct procedures in private hospitals and day surgery facilities. The applicant notes that podiatric surgeons do not currently have admitting rights in any public hospitals. Some minor procedures may be performed in a podiatric surgeon’s consulting room. The setting in which the treatment is delivered will be dependent upon the nature and complexity of the condition and choice of therapy.

**Question for the assessment**

Would podiatric surgeons perform the same procedures as orthopaedic surgeons in different settings (i.e. in or out of hospital treatment for Medicare and PHI benefit purposes)?

*The assessment should review MBS utilisation data for the relevant MBS items to investigate the settings in which services are currently provided by Medicare eligible medical practitioners and compare those with podiatric surgeons. If the same procedures are undertaken in different settings between the different profession groups, is the level of complexity of disease and disorder and treatment also different?*

The proposal represents a broadening of the health professionals who are able to offer patients selected surgical treatments and claim benefits from the MBS. These procedures are currently performed by podiatric surgeons and as such the proposal may change the procedures or practices of podiatric surgeons in response to changes to the reimbursement framework in which they are provided. The proposal may increase the utilisation of associated MBS items for the diagnosis and treatment of foot and ankle conditions. The assessment should explore the impact of Medicare funded podiatric surgery services on access to these services and on costs/savings to government, PHI and consumers.

## Co-administered interventions

Co-administered interventions will consist of those associated with surgical treatment including diagnostic services, anaesthesiology services as well as pharmacological pain relief. Patients would also be referred to GPs and Podiatrists for follow-up.

Co-administered interventions may include:

* inpatient services
* pharmaceutical pain relief
* follow-up protocols
* rehabilitative therapies
* diagnostic tests
* anaesthesia

Relevant diagnostic tests may include X-ray, nuclear medical imaging, ultrasound, physical assessment and tests to establish the presence of degenerative disease or chronic illness.

Local anaesthesia may be provided by a podiatric surgeon whilst procedures necessitating general anaesthesia require an anaesthetist. A podiatrist or podiatric surgeon who has completed an approved program of study in podiatric therapeutics and one of two experience pathways (seven years of post-graduate experience or completion of web-based case studies and supervised prescribing practice by an endorsed prescriber approved by the Podiatry Board of Australia), are eligible for endorsement by the Podiatry Board of Australia to prescribe scheduled medicines. However, podiatrists and podiatric surgeons are limited to prescribing S2 (pharmacy medicine), S3 (pharmacist only medicine), S4 (prescription only medicine) and S8 (controlled drug) drugs and they are not considered under the Pharmaceutical Benefits Scheme ([Podiatry board of Australia 2013a](#_ENREF_9)). PASC noted that in-hospital podiatric surgery services have access to anaesthetists who can prescribe PBS anaesthesia.

Surgical treatments will generally require theatre nurse staff. The applicant indicates that postoperative care is provided for three to 12 months depending on the complexity of surgery and anticipated time to return to normal function. *The assessment phase should address how adverse events are managed by podiatric surgeons, and provide advice as to how this compares with orthopaedic surgeons.*

# Patient population

## Proposed MBS listing

The proposal is for access to existing MBS items by podiatric surgeons, who are currently not a recognised provider group for Medicare purposes.Legislative issues relating to the recognition of podiatric surgeons as Specialists and medical practitioners will affect this application. We suggest that these issues would be dealt with separately from the evidence-based evaluation as informed by the protocol.

The suggested patient population is ’patients with foot or ankle pathologies eligible for surgery’. This is in line with current MBS item descriptors which do not define the eligibility of a patient to receive surgery. The applicant has provided the following statement regarding the patient population:

Patients who present with one or more comorbidities are in the first instance deemed suitable for an opinion and performance of elective foot surgery by the general practitioner who referred them. After examination, if the podiatric surgeon is concerned about any element of the patient's health, for example a history of respiratory disease which may impact on anaesthesia or reduced lower limb vascular status (e.g. a history of lower limb circuitry disease) which may impact on healing, written clearance or intervention as appropriate prior to performance of surgery is requested of the patient's treating specialist in collaboration with the patient's general practitioner.

*Question for PASC and for consultation: Should this population be considered equivalent to patients with foot or ankle pathologies eligible for surgery treated by orthopaedic surgeons? Or should this be considered to represent a sub-population of the cohort treated by orthopaedic surgeons?*

## Clinical place for proposed intervention

The applicant proposes that podiatric surgeons be granted access to a range of MBS item numbers for the surgical treatment of foot and ankle conditions. This application proposes an alternative provider as opposed to a new or substitute intervention. The applicant claims that the interventions may be provided in the following settings:

* inpatient private hospitals
* inpatient public hospitals
* outpatient clinics
* consulting rooms
* day surgery centres.

The applicant also notes that rarely a podiatric surgeon may consult and provide minor procedures in the emergency room, a patient’s home or residential care. The application also includes both consultative and surgical activities. *The assessment should review MBS utilisation data by ‘in and out of hospital’ setting for the requested MBS items, and compare this with the setting in which podiatric surgeons provide these services.*

The applicant indicates that patients will be referred to podiatric surgeons by their GPs or other medical specialists.

Podiatric surgeons will provide a consultation service and expect to order diagnostic tests involving pathology and radiology. Currently Podiatrists may request diagnostic services; however, the service is not covered under Medicare.

Following an assessment the patient may be referred for non-surgical management or have surgery performed by a podiatric surgeon. Podiatrists and GPs are likely to be involved in the follow-up of patients. Detailed narrative clinical algorithms for eight conditions (Hallux valgus, hindfoot/ankle pathology, ingrown toenail, hallux rigidus, heel pain, nerve impingement and tumour) have been provided by the applicant. These algorithms describe the approach of podiatric surgeons to diagnosis, non-surgical, surgical and postoperative care for the eight services mentioned in the application and may be provided upon request.

The clinical management algorithms provided in Figure 2 and Figure 3 have been developed with reference to the underlying claim of the application. The interventions specified are currently reimbursed, as such, the testing of the clinical safety and efficacy of the interventions is not warranted. The key issue for this protocol is the non-inferiority of the intervention when provided by a podiatric surgeon as compared to specialists with access to the specified MBS items.

PASC agreed that a separate clinical management algorithm for each condition is not required. The assessment should test the application’s claims broadly as well as for each condition specified for inclusion in the assessment.

Figure 2 Current clinical management algorithm



Figure 3 Proposed clinical management algorithm



# Comparator

The comparator as indicated in the clinical management algorithms is **the foot and ankle service provided by orthopaedic surgeons**.

Non-surgical podiatry and medical/pharmaceutical relief are provided in a different arm of the clinical pathway and are not comparators for the purposes of this protocol.

# Clinical claim

The clinical claim relevant to this application, and which will need to be tested via an assessment of the evidence is:

* Surgery of the foot and ankle as provided by podiatric surgeons is equivalent in terms of safety and effectiveness compared to orthopaedic surgeons.

Given the expected paucity of evidence relating to the safety and efficacy of MBS approved treatments in which the main comparison is the service provider, the assessment phase will need to consider what will constitute appropriate evidence to substantiate the clinical claim. Relevant considerations include:

* Training and accreditation processes for podiatric surgeons are not necessarily comparable at an international level. Is evidence from an international context likely to be transferable to an Australian context?
* In what level of detail, if any, should the protocol specify what evidence would be considered appropriate to address the claim?

As shown in Table 2, the evaluation should test the claim that the outcomes of foot and ankle surgery as provided by podiatric surgeons are equivalent in terms of safety and effectiveness to the outcomes of an orthopaedic surgeon.

Table 2: Classification of an intervention for determination of economic evaluation to be presented

|  |  |
| --- | --- |
|  | **Comparative effectiveness versus comparator** |
| Superior | Non-inferior | Inferior |
| **Comparative safety versus comparator** | Superior | CEA/CUA | CEA/CUA | Net clinical benefit | CEA/CUA |
| Neutral benefit | CEA/CUA\* |
| Net harms | None^ |
| Non-inferior | CEA/CUA | **CEA/CUA\*** | None^ |
| Inferior | Net clinical benefit | CEA/CUA | None^ | None^ |
| Neutral benefit | CEA/CUA\* |
| Net harms | None^ |

Abbreviations: CEA = cost-effectiveness analysis; CUA = cost-utility analysis

\* May be reduced to cost-minimisation analysis. Cost-minimisation analysis should only be presented when the proposed service has been indisputably demonstrated to be no worse than its main comparator(s) in terms of both effectiveness and safety, so the difference between the service and the appropriate comparator can be reduced to a comparison of costs. In most cases, there will be some uncertainty around such a conclusion (i.e., the conclusion is often not indisputable). Therefore, when an assessment concludes that an intervention was no worse than a comparator, an assessment of the uncertainty around this conclusion should be provided by presentation of cost-effectiveness and/or cost-utility analyses.

^ No economic evaluation needs to be presented; MSAC is unlikely to recommend government subsidy of this intervention

# Outcomes and health care resources affected by introduction of proposed intervention

## Outcomes

At the assessment phase all evidence should be assessed for its applicability and transferability to the Australian context in relation to procedures performed, post-surgical care and surgical training. Questions of generalisability across procedures and interventions should also be considered.

Primary effectiveness

* Improvement in function and/or mobility
* Reduction in deformity
* Relief of pain
* Patient related outcomes including quality of life

Secondary effectiveness

* Arrested degeneration
* Time to return to work
* Time to return to daily activities
* Recurrence
* Length of hospital stays

Safety

* Any procedure related adverse event
* Pain and discomfort
* Cardiovascular outcomes
* Infection
* Management and resolution of intra- and post-operative complications

## Health care resources

*Information regarding the current and proposed utilisation of resources should be presented in the assessment. Depending on the condition being treated/service provided health care resource utilisation will vary.*

The health care resources required to provide the service in a hospital or out of hospital setting irrespective of provider may include:

* Radiology services for diagnosis
* Pathology services for diagnosis
* Specialist surgeon
* Nursing staff to assist before, during and after the procedure
* Anaesthetist
* Standard theatre equipment
* Location of service (in-hospital, out-of-hospital, day surgery and so on)
* Follow-up care (including management by GP or podiatrist)

Table 3: List of resources to be considered in the economic analysis

|  | **Provider of resource** | **Setting in which resource is provided** | **Proportion of patients receiving resource** | **Number of units of resource per relevant time horizon per patient receiving resource** | **Disaggregated unit cost** |
| --- | --- | --- | --- | --- | --- |
| **MBS** | **Safety nets\*** | **Other govt budget** | **Private health insurer** | **Patient** | **Total cost** |
| Resources provided to identify eligible population  |
| * + - Visit to a primary healthcare provider, may be a podiatrist, GP etc
 | PodiatristGP | Public and Private |  |  |  |  |  |  |  |  |
| * + - Radiology
 |  |  |  |  |  |  |  |  |  |  |
| * + - Pathology
 |  |  |  |  |  |  |  |  |  |  |
| Resources provided to deliver comparator 1 |
| * + - Consultation
 |  |  |  |  |  |  |  |  |  |  |
| * + - Radiology
 |  |  |  |  |  |  |  |  |  |  |
| * + - Pathology
 |  |  |  |  |  |  |  |  |  |  |
| * + - Theatre costs
 |  |  |  |  |  |  |  |  |  |  |
| * + - Anaesthesia costs/anaesthesiologists/physician
 |  |  |  |  |  |  |  |  |  |  |
| * + - Assessment and surgery
 |  |  |  |  |  |  |  |  |  |  |
| Resources provided in association with comparator 1 (e.g., pre-treatments, co-administered interventions, resources used to monitor or in follow-up, resources used in management of adverse events, resources used for treatment of down-stream conditions) |
| * + - Costs associated with follow-up
 |  |  |  |  |  |  |  |  |  |  |
| * + - Pharmaceuticals (pain relief)
 |  |  |  |  |  |  |  |  |  |  |
| Resources provided to deliver comparator 2, etc |
| * + - Resource 1
 |  |  |  |  |  |  |  |  |  |  |
| * + - Resource 2, etc
 |  |  |  |  |  |  |  |  |  |  |
| Resources provided in association with comparator 2, etc |
| * + - Resource 1
 |  |  |  |  |  |  |  |  |  |  |
| * + - Resource 2, etc
 |  |  |  |  |  |  |  |  |  |  |
| Resources provided to deliver proposed intervention |
| * + - Consultation
 |  |  |  |  |  |  |  |  |  |  |
| * + - Radiology
 |  |  |  |  |  |  |  |  |  |  |
| * + - Pathology
 |  |  |  |  |  |  |  |  |  |  |
| * + - Theatre costs
 |  |  |  |  |  |  |  |  |  |  |
| * + - Anaesthesia costs/anaesthesiologists/physician
 |  |  |  |  |  |  |  |  |  |  |
| * + - Assessment and surgery
 |  |  |  |  |  |  |  |  |  |  |
| Resources provided in association with proposed intervention |
| * + - Costs associated with follow-up
 |  |  |  |  |  |  |  |  |  |  |
| * + - Pharmaceuticals (pain relief)
 |  |  |  |  |  |  |  |  |  |  |

# Proposed structure of economic evaluation (decision-analytic)

Table 4: Summary of extended PICO to define research question that assessment will investigate

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Patients** | **Intervention** | **Comparator** | **Outcomes to be assessed** | **Healthcare resources to be considered** |
| Patients with foot or ankle pathologies eligible for surgery | As this is an initial application for access to MBS item numbers by a new group of providers, it includes both consultative and surgical activities.Provision of surgical foot and ankle treatment services or consultation by a podiatric surgeon | Provision of surgical foot and ankle treatment services by an orthopaedic surgeon | Primary effectiveness * Mobility
* Patient related outcomes including quality of life, comfort and pain

Secondary effectiveness * Arrested degeneration
* Time to return to work
* Time to return to daily activities
* Recurrence
* Length of hospital stays

Safety* Any procedure related adverse event
* Pain and discomfort
* Cardiovascular outcomes
 | TBC (see Table 4) |

The application raises various questions regarding the nature of management of patients with foot and ankle conditions and how the overall management of patients with foot and ankle conditions by podiatric surgeons may differ from that provided by the orthopaedic surgery profession. However, the central concern of this protocol is the comparative safety and efficacy of the various surgical procedures when performed by a podiatric surgeon as compared to an orthopaedic surgeon. **The assessment phase will need to present evidence to substantiate the claim of non-inferiority in terms of clinical and cost effectiveness and safety. The assessment phase should also present evidence to confirm whether the patient population represented in the above table is equivalent to the current population treated by orthopaedic surgeons, or is a sub-population (for example is representative of a less severe patient cohort).**

All international evidence should be presented in terms of its direct relevance to the Australian context and whether there are any issues relating to evidence translation. Issues should include training and accreditation of podiatric and orthopaedic surgeons, the type of service provided, broad issues of patient care and resource availability for the service as a whole.

The key question for public funding is:

1. Are the services provided by podiatric surgeons as safe and effective as those provided by orthopaedic surgeons?

Other questions and considerations for public funding include:

1. Would patients be offered different surgical procedures (for the same condition) by podiatric surgeons as compared to orthopaedic surgeons?
2. Would patient management by a podiatric surgeon result in the utilisation of fewer MBS items as compared to management by an orthopaedic surgeon for management of the same condition?
3. Are the surgical techniques performed by podiatric surgeons comparable, in terms of complexity and for the same level of disease and dysfunction, as those performed by orthopaedic surgeons?
4. Are foot and ankle surgery services by podiatric surgeons provided at the same line of treatment as orthopaedic surgeons?
5. How is pre and post-operative risk dealt with by podiatric surgeons compared to orthopaedic surgeons?
6. What undergraduate and postgraduate training are undertaken by podiatric surgeons, including curricula, compared to orthopaedic surgeons?
7. How are patients referred to podiatric surgeons from other health practitioners?
8. What arrangements exist for podiatric surgeons to refer to other health practitioners and specialists?
9. How do podiatric surgeons provide multidisciplinary patient care, particularly with other podiatrists, medical practitioners, physiotherapists and occupational therapists?
10. What arrangements exist for podiatric surgeons to prescribe medications?
11. What arrangements exist for podiatric surgeons to request pathology testing or diagnostic imaging?
12. What care planning is undertaken by podiatric surgeons regarding surgical options and postoperative rehabilitation?
13. How do podiatric surgeons manage intraoperative complications, such as cardiac arrest?
14. How do podiatric surgeons manage postoperative medical problems, such as venous thromboembolic disease, myocardial infarction or pneumonia?
15. How do podiatric surgeons approach the prevention and management of postoperative infection?
16. How do podiatric surgeons follow up and monitor their patients?
17. What are the anticipated costs or savings to Government and consumers should this application be approved?

**References**

Access Economics Pty Limited 2008, *The economic impact of podiatric surgery*, Access Economics Pty Limited, viewed 29/04 2013, <[http://acps.edu.au/cms\_files/Podiatric\_Surgery\_Report220908b.pdf>](http://acps.edu.au/cms_files/Podiatric_Surgery_Report220908b.pdf%3E).

Australian & New Zealand Podiatry Accreditation Council Inc. 2012, *Accreditation Standards for Podiatric Surgery Programs*, viewed 18/04 2013, <[http://www.podiatryboard.gov.au/Accreditation.aspx>](http://www.podiatryboard.gov.au/Accreditation.aspx%3E).

Bennett, PJ, Patterson, C, Wearing, S & Baglioni, T 1998, 'Development and validation of a questionnaire designed to measure foot-health status', *J Am Podiatr Med Assoc*, vol.88(9), pp. 419-28.

Frank, CJ 2012, *Hallux Valgus*, Medscape reference, viewed 22/05 2013, <<http://emedicine.medscape.com/article/1232902-overview#a0112>>.

Hill, CL, Gill, TK, Menz, HB & Taylor, AW 2008, 'Prevalence and correlates of foot pain in a population-based study: the North West Adelaide health study', *J Foot Ankle Res*, vol.1(1), pp. 2.

Menz, HB, Gilheany, MF & Landorf, KB 2008, 'Foot and ankle surgery in Australia: a descriptive analysis of the Medicare Benefits Schedule database, 1997-2006', *J Foot Ankle Res*, vol.1(1), pp. 10.

Podiatry board of Australia 2013a, *Policies, codes and guidelines*, viewed 19 November 2013 2013, <[http://www.podiatryboard.gov.au/Policies-Codes-Guidelines.aspx>](http://www.podiatryboard.gov.au/Policies-Codes-Guidelines.aspx%3E).

Podiatry Board of Australia 2013b, *Statistics*, viewed 19 November 2013 2013, <[http://www.podiatryboard.gov.au/About/Statistics.aspx>](http://www.podiatryboard.gov.au/About/Statistics.aspx%3E).

Schraga, ED 2012, *Ingrown toenail removal*, Medscape reference, viewed 22 May 2013, <<http://emedicine.medscape.com/article/149627-overview#a15>>.

WebMD 2013, *Medical Information*, WebMD, viewed 22/05 2013, <[http://www.webmd.com/a-to-z-guides/should-i-have-surgery-for-hammer-claw-or-mallet-toes>](http://www.webmd.com/a-to-z-guides/should-i-have-surgery-for-hammer-claw-or-mallet-toes%3E).

**APPENDIX A MBS item numbers requested**

| Category 3 - THERAPEUTIC PROCEDURES |
| --- |
| [**30241**](http://www9.health.gov.au/mbs/fullDisplay.cfm?type=item&q=30241&qt=item&criteria=30241)BONE TUMOUR, INNOCENT, excision of, not being a service to which another item in this Group applies (Anaes.) (Assist.)Fee: $356.35 Benefit: 75% = $267.30 85% = $302.90 |

| Category 3 - THERAPEUTIC PROCEDURES |
| --- |
| [**31350**](http://www9.health.gov.au/mbs/fullDisplay.cfm?type=item&q=31350&qt=item&criteria=31350)BENIGN TUMOUR of SOFT TISSUE, excluding tumours of skin, cartilage, and bone, simple lipomas covered by item 31345 and lipomata, removal of by **surgical excision, *where the specimen excised is sent for histological confirmation of diagnosis,* n**ot being a service to which another item in this Group applies Fee: $433.35 Benefit: 75% = $325.05 85% = $368.35 |

| Category 3 - THERAPEUTIC PROCEDURES |
| --- |
| **47918**INGROWING TOENAIL, radical excision of nailbed Multiple Services Rule(Anaes.) Fee: $235.50 Benefit: 75% = $176.65 85% = $200.20  |

| Category 3 - THERAPEUTIC PROCEDURES |
| --- |
| **47915**INGROWING NAIL OF TOE, wedge resection for, with removal of segment of nail, ungual fold and portion of the nail bed Multiple Services Rule(Anaes.) Fee: $169.50 Benefit: 75% = $127.15 85% = $144.10  |

| Category 3 - THERAPEUTIC PROCEDURES |
| --- |
|  **49809**FOOT, open tenotomy of, with or without tenoplasty Multiple Services Rule(Anaes.) Fee: $216.50 Benefit: 75% = $162.40  |

| Category 3 - THERAPEUTIC PROCEDURES |
| --- |
|  **49806**FOOT, subcutaneous tenotomy of, 1 or more tendons Multiple Services Rule(Anaes.) Fee: $131.85 Benefit: 75% = $98.90 85% = $112.10  |

| Category 3 - THERAPEUTIC PROCEDURES |
| --- |
|  **49851**FOOT, correction of claw or hammer toe with internal fixationMultiple Services Rule(Anaes.) Fee: $207.00 Benefit: 75% = $155.25  |

| Category 3 - THERAPEUTIC PROCEDURES |
| --- |
|  **49848**FOOT, correction of claw or hammer toe Multiple Services Rule(Anaes.) Fee: $160.05 Benefit: 75% = $120.05 85% = $136.05  |

| Category 3 - THERAPEUTIC PROCEDURES |
| --- |
|  **49833**FOOT, correction of hallux valgus by osteotomy of first metatarsal with or without internal fixation and with or without excision of exostoses associated with the first metatarsophalangeal joint - unilateral Multiple Services Rule(Anaes.) (Assist.)Fee: $517.80 Benefit: 75% = $388.35  |

| Category 3 - THERAPEUTIC PROCEDURES |
| --- |
|  **49836**FOOT, correction of hallux valgus by osteotomy of first metatarsal with or without internal fixation and with or without excision of exostoses associated with the first metatarsophalangeal joint - bilateral Multiple Services Rule(Anaes.) (Assist.)Fee: $894.40 Benefit: 75% = $670.80  |

| Category 3 - THERAPEUTIC PROCEDURES |
| --- |
|  **49845**FOOT, arthrodesis of, first metatarso-phalangeal joint, with synovectomy if performed Multiple Services Rule(Anaes.) (Assist.)Fee: $470.70 Benefit: 75% = $353.05  |

| Category 3 - THERAPEUTIC PROCEDURES |
| --- |
|  **49866**FOOT, neurectomy for plantar or digital neuritis (Morton's or Bett's syndrome) Multiple Services Rule(Anaes.) (Assist.)Fee: $301.05 Benefit: 75% = $225.80  |

| Category 3 - THERAPEUTIC PROCEDURES |
| --- |
|  **49854**FOOT, radical plantar fasciotomy or fasciectomy of Multiple Services Rule(Anaes.) (Assist.)Fee: $376.55 Benefit: 75% = $282.45  |

| Category 3 - THERAPEUTIC PROCEDURES |
| --- |
|  **49815**FOOT, triple arthrodesis of, with synovectomy if performed Multiple Services Rule(Anaes.) (Assist.)Fee: $753.25 Benefit: 75% = $564.95  |

| Category 3 - THERAPEUTIC PROCEDURES |
| --- |
|  **50118**SUBTALAR JOINT, arthrodesis of, with synovectomy if performed Multiple Services Rule(Anaes.) (Assist.)Fee: $432.95 Benefit: 75% = $324.75  |

| Category 3 - THERAPEUTIC PROCEDURES |
| --- |
|  **50333**TARSAL COALITION, excision of, with interposition of muscle, fat graft or similar graft Multiple Services Rule(Anaes.) (Assist.)Fee: $616.85 Benefit: 75% = $462.65  |

| Category 3 - THERAPEUTIC PROCEDURES |
| --- |
|  **48403**PHALANX OR METATARSAL, osteotomy or osteectomy of, with internal fixation, and excluding services to which items 47933 or 47936 apply Multiple Services Rule(Anaes.) (Assist.)Fee: $517.80 Benefit: 75% = $388.35  |

| Category 3 - THERAPEUTIC PROCEDURES |
| --- |
|  **48409**FIBULA, RADIUS, ULNA, CLAVICLE, SCAPULA (other than Acromion), RIB, TARSUS OR CARPUS, osteotomy or osteectomy of, with internal fixation, and excluding services to which items 47933 or 47936 apply Multiple Services Rule(Anaes.) (Assist.)Fee: $517.80 Benefit: 75% = $388.35  |

| Category 3 - THERAPEUTIC PROCEDURES |
| --- |
|  **50103**JOINT, arthrotomy of, not being a service to which another item in this Group applies Multiple Services Rule(Anaes.) (Assist.)Fee: $329.60 Benefit: 75% = $247.20  |

| Category 3 - THERAPEUTIC PROCEDURES |
| --- |
|  **50109**JOINT, arthrodesis of, not being a service to which another item in this Group applies, with synovectomy if performed Multiple Services Rule (Anaes.) (Assist.)Fee: $470.70 Benefit: 75% = $353.05  |

| Category 3 - THERAPEUTIC PROCEDURES |
| --- |
|  **47927**BURIED WIRE, PIN OR SCREW, 1 or more of, which were inserted for internal fixation purposes, removal of, in the operating theatre of a hospital - per bone Multiple Services Rule(Anaes.) Fee: $141.25 Benefit: 75% = $105.95  |

| Category 3 - THERAPEUTIC PROCEDURES |
| --- |
|  **47930**PLATE, ROD OR NAIL AND ASSOCIATED WIRES, PINS OR SCREWS, 1 or more of, all of which were inserted for internal fixation purposes, removal of, not being a service associated with a service to which item 47924 or 47927 applies - per bone Multiple Services Rule(Anaes.) (Assist.)Fee: $263.60 Benefit: 75% = $197.70  |

| Category 3 - THERAPEUTIC PROCEDURES |
| --- |
|  **47954**TENDON, repair of, as an independent procedure Multiple Services Rule(Anaes.) (Assist.)Fee: $376.55 Benefit: 75% = $282.45 85% = $320.10  |

| Category 3 - THERAPEUTIC PROCEDURES |
| --- |
|  **47957**TENDON, large, lengthening of, as an independent procedure Multiple Services Rule(Anaes.) (Assist.)Fee: $282.35 Benefit: 75% = $211.80  |

| Category 3 - THERAPEUTIC PROCEDURES |
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|  **47921**ORTHOPAEDIC PIN OR WIRE, insertion of, as an independent procedure Multiple Services Rule(Anaes.) Fee: $112.85 Benefit: 75% = $84.65 85% = $95.95  |

| Category 3 - THERAPEUTIC PROCEDURES |
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|  **47726**BONE GRAFT, harvesting of, via separate incision, in conjunction with another service - autogenous - small quantity Multiple Services Rule(Anaes.) Fee: $141.25 Benefit: 75% = $105.95  |

| Category 3 - THERAPEUTIC PROCEDURES |
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|  **50127**JOINT OR JOINTS, arthroplasty of, by any technique not being a service to which another item applies Multiple Services Rule(Anaes.) (Assist.)Fee: $702.50 Benefit: 75% = $526.90  |

| Category 3 - THERAPEUTIC PROCEDURES |
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|  **50102**JOINT, arthroscopic surgery of, not being a service to which another item in this Group applies Multiple Services Rule(Anaes.) (Assist.)Fee: $611.90 Benefit: 75% = $458.95  |

| Category 3 - THERAPEUTIC PROCEDURES |
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|  **48406**FIBULA, RADIUS, ULNA, CLAVICLE, SCAPULA (other than acromion), RIB, TARSUS OR CARPUS, osteotomy or osteectomy of, excluding services to which items 47933 or 47936 apply Multiple Services Rule(Anaes.) (Assist.)Fee: $329.60 Benefit: 75% = $247.20  |

| Category 3 - THERAPEUTIC PROCEDURES |
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|  **48400**PHALANX, METATARSAL, ACCESSORY BONE OR SESAMOID BONE, osteotomy or osteectomy of, excluding services to which item 49848 or 49851 applies, any of items 49848, 49851, 47933 or 47936 apply Multiple Services Rule(Anaes.) (Assist.)Fee: $329.60 Benefit: 75% = $247.20  |

| Category 3 - THERAPEUTIC PROCEDURES |
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|  **47936**LARGE EXOSTOSIS (GREATER THAN 20MM GROWTH ABOVE BONE), excision of Multiple Services Rule(Anaes.) (Assist.)Fee: $254.20 Benefit: 75% = $190.65 (See para T8.114 of explanatory notes to this Category) |

| Category 3 - THERAPEUTIC PROCEDURES |
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|  **47933**SMALL EXOSTOSIS (NOT MORE THAN 20MM OF GROWTH ABOVE BONE), excision of, or simple removal of bunion and any associated bursa, not being a service associated with a service for removal of bursa Multiple Services Rule(Anaes.) Fee: $207.00 Benefit: 75% = $155.25 85% = $175.95 (See para T8.114 of explanatory notes to this Category) |

| Category 3 - THERAPEUTIC PROCEDURES |
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|  **30226**MUSCLE, excision of (LIMITED), or fasciotomy Multiple Services Rule(Anaes.) Fee: $149.75 Benefit: 75% = $112.35 85% = $127.30  |

| Category 3 - THERAPEUTIC PROCEDURES |
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|  **30107 Specialist** GANGLION OR SMALL BURSA, excision of, not being a service associated with a service to which another item in this Group applies Multiple Services Rule(Anaes.) Fee: $219.95 Benefit: 75% = $165.00 85% = $187.00  |

| Category 3 - THERAPEUTIC PROCEDURES |
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|  **18272**SAPHENOUS, SURAL, POPLITEAL OR POSTERIOR TIBIAL NERVE, MAIN TRUNK OF, 1 or more of, injection of an anaesthetic agent Fee: $62.50 Benefit: 75% = $46.90 85% = $53.15 (See para T7.5 of explanatory notes to this Category) |

| Category 3 - THERAPEUTIC PROCEDURES |
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| **39330**NEUROLYSIS by open operation without transposition, not being a service associated with a service to which item 39312 applies Multiple Services Rule(Anaes.) (Assist.)Fee: $276.80 Benefit: 75% = $207.60  |

| Category 3 - THERAPEUTIC PROCEDURES |
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| **30186**PALMAR OR PLANTAR WARTS (less than 10), definitive removal of, excluding ablative methods alone, not being a service to which item 30185 or 30187 applies Multiple Services Rule(Anaes.) Fee: $47.45 Benefit: 75% = $35.60 85% = $40.35 (See para T8.9 of explanatory notes to this Category) |

| Category 1 – PROFFESSIONAL ATTENDANCES |
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|  **105**Each attendance SUBSEQUENT to the first in a single course of treatment Fee: $43.00 Benefit: 75% = $32.25 85% = $36.55 Extended Medicare Safety Net Cap: $129.00 |

| Category 1 – PROFFESSIONAL ATTENDANCES |
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|  **104**SPECIALIST, REFERRED CONSULTATION - SURGERY OR HOSPITAL (Professional attendance at consulting rooms or hospital by a specialist in the practice of his or her specialty where the patient is referred to him or her)  INITIAL attendance in a single course of treatment, not being a service to which ophthalmology items 106, 109 or obstetric item 16401 apply. Fee: $85.55 Benefit: 75% = $64.20 85% = $72.75 Extended Medicare Safety Net Cap: $256.65 |

| Category 3 - THERAPEUTIC PROCEDURES |
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| **51303**Assistance at any operation identified by the word "Assist." for which the fee exceeds $558.30 or at a series of operations identified by the word "Assist." for which the aggregate fee exceeds $558.30 one fifth of the established fee for the operation or combination of operations (See para T9.1, T9.3 of explanatory notes to this Category) |

| Category 3 - THERAPEUTIC PROCEDURES |
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| **51300**Assistance at any operation identified by the word "Assist." for which the fee does not exceed $558.30 or at a series or combination of operations identified by the word "Assist." where the fee for the series or combination of operations identified by the word "Assist." does not exceed $558.30 Fee: $86.30 Benefit: 75% = $64.75 85% = $73.40 (See para T9.1, T9.2 of explanatory notes to this Category) |

 **Explanatory notes**

| Category 3 - THERAPEUTIC PROCEDURES |
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|  **T8.114 Removal of Multiple Exostoses (Items 47933 and 47936)** Items 47933 and 47936 provide for removal of multiple exostoses when undertaken via the same incision.Related Items: 47933, 47936 |

| Category 3 - THERAPEUTIC PROCEDURES |
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|  **T7.5 Regional or Field Nerve Blocks - (Items 18234 to 18298)** Items in the range 18234 - 18298 are intended to cover the injection of anaesthetic into the nerve or nerve sheath and not for the treatment of carpal tunnel or similar compression syndromes.Paravertebral nerve block items 18274 and 18276 cover the provision of regional anaesthesia for surgical and related procedures for the management acute pain or of chronic pain related to radiculopathy. Infiltration of the soft tissue of the paravertebral area for the treatment of other pain symptoms does not attract benefit under these items. Additionally, items 18274 and 18276 do not cover facet joint blocks/injections. This procedure is covered under item 39013.Item 18292 may not be claimed for the injection of botulinum toxin, but may be claimed where a neurolytic agent (such as phenol) is used to treat the obturator nerve in patients receiving botulinum toxin injections under items 18354, 18356, or 18358 for a dynamic foot deformity. |