

Low value services

There are a number of services funded through the Medicare Benefits Schedule (MBS) which do not provide patients with high quality care. Some MBS items are used in very low volumes as they have been replaced with new, better services. In other cases, some tests or procedures which provide benefit to some patients are being used excessively. That is, they are used for patients who are unlikely to benefit from the test or procedure, and may be harmed. Some examples of procedures which may be over-used are provided below

- Knee arthroscopy
- Imaging for low back pain
- Tonsillectomy
- Bone Mineral Density Testing for Older Australians (particular concerns about the frequency of testing for people over 70).
- Colonoscopy – with some people receiving too many, or too frequent colonoscopies, while there may be under-use in other populations.

There is good Australian and international evidence that these services may be of low value to some patients, and that there are high rates of use in Australia.

Knee arthroscopy

MBS data	2004-05	2014-15	Increase (number)	Increase (%)
Number of services	50,182	58,126	7,944	16%
Benefits paid	\$19,384,331	\$27,981,075	\$8,596,744	44%

- Knee arthroscopy is a procedure used to examine and, if necessary, repair the inside of the knee joint. Arthroscopies are of some assistance to some patients.
- A report by the Australian Commission on Quality and Safety in Health Care demonstrated that the variation in the number of arthroscopies was relatively high across Australia. Unwarranted variation can raise questions about quality, equity and efficiency in health care¹. According to the Commission, in 2010-11, the "Australian standardised rate of admission for knee arthroscopy was 382 per 100,000. Rates across Medicare Locals ranged from 232 admissions per 100,000 population (Inner West Sydney) to 726 admissions per 100,000 (Country North SA), a 3-fold variation".
- Knee arthroscopies are of little benefit if the underlying cause of the problems is osteoarthritis². Thirty five per cent of services are provided to patients over 60. It is likely that many of these patients have osteoarthritis.
- Knee arthroscopies can be painful, inconvenient, and costly for patients, and provide them with no benefit.
- Exercise and physiotherapy can assist some people with osteoarthritis.

Imaging for low back pain

MBS data*	2004-05	2014-15	Increase (number)	Increase (%)
Number of services	882,840	1,000,833	117,993	13%
Benefits paid	\$96,627,348	\$134,603,708	\$37,976,360	39%

¹ <http://www.safetyandquality.gov.au/wp-content/uploads/2014/05/Exploring-Healthcare-Variation-in-Australia-Analyses-Resulting-from-an-OECD-Study.pdf> (Published 2014).

² Laupattarakasem W, Laopaiboon M, Laupattarakasem P, Sumananont C. Arthroscopic debridement for knee osteoarthritis. Cochrane Database Systematic Review 2008;CD005118(1).
Sihvonen R, Paavola M, Malmivaara A, Itälä A, Joukainen A, Nurmi H, et al. Arthroscopic Partial Meniscectomy versus Sham Surgery for a Degenerative Meniscal Tear. *New England Journal of Medicine* 2013;369(26):2515–2524.
http://www.nejm.org/doi/full/10.1056/NEJMoa1305189?query=featured_home&

* Includes all MBS items for X-ray and CT which could include the low back. Will include patients who have these tests for other reasons. More than 300,000 people had a low-back X-ray in 2014-15. More than 300,000 people had a low-back CT in 2014-15.

According to the National Prescribing Service and the profession³, imaging is not recommended for acute (short-term) low back pain because:

- Most people feel better soon, whether or not they have imaging
- X-rays may show spinal changes unrelated to pain and which do not need treatment. This can lead to unnecessary follow-up tests and procedures (spinal surgery, injections) and stress and anxiety.
- X-rays expose people to radiation.⁴

Studies have shown that imaging (x-rays or CTs) are ordered too commonly for back pain in Australia. According to one study, one in four patients of people visiting their GP the first time for low back pain were referred for imaging.

Tonsillectomy

MBS data	2004-05	2014-15	Increase (number)	Increase (%)
Number of services	19,030	31,150	12,120	64%
Benefits paid	\$3,774,878	\$7,223,283	\$3,448,405	91%

- Studies show there is modest benefit for some patients, and many people improve without surgery.
- These studies also showed that there is a risk associated with having surgery⁵.
- 68 per cent of MBS services are provided to people under 15.

Colonoscopy

MBS data	2004-05	2014-15	Increase (number)	Increase (%)
Number of services	314,716	591,094	276,378	88%
Benefits paid	\$74,869,403	\$176,419,350	\$101,549,947	136%

- Colonoscopy is a day-procedure that usually requires anaesthetic. It can be used for many reasons – to investigate a patient for suspected cancer, or to investigate a range of conditions.
- However, there is some evidence of over-use of colonoscopy for some patients. This can mean that people who require colonoscopy need to wait longer.
- Choosing Wisely campaigns⁶ internationally have recommended against using colonoscopy in some patients without symptoms and recommending minimum intervals between testing.
- Medicare data shows that patients in some areas of Australia are much more likely to have a colonoscopy than people in other areas of Australia. For example, people living in 'Eastern Suburbs – North' (around Bondi) are twice as likely to have a colonoscopy as those living in Inner City Sydney (per capita).

Bone Mineral Density Testing for people aged over 70

³ <http://www.choosingwisely.org.au/recommendations/ranzcr>

⁴ <http://www.nps.org.au/medical-tests/medical-imaging/for-individuals/types-of-imaging/x-rays/for-individuals/when-it-is-not-used/not-for-low-back-pain>. Further information also at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3389113/>

⁵ Burton MJ, Glasziou PP, Chong L, Venekamp RP. Tonsillectomy or adenotonsillectomy versus non-surgical treatment for chronic/recurrent acute tonsillitis. Cochrane Database of Systematic Reviews 2014, Issue 11. Art. No.: CD001802. DOI: 10.1002/14651858.CD001802.pub3

⁶ <http://www.choosingwiselycanada.org/materials/colonoscopy-when-you-need-it-and-when-you-dont/>,
<http://www.choosingwiselycanada.org/recommendations/oncology/>,
<http://www.choosingwiselycanada.org/recommendations/gastroenterology-2/>,
<http://www.choosingwiselycanada.org/recommendations/general-surgery/>,
<http://www.choosingwisely.org/clinician-lists/american-college-surgeons-repeat-colonoscopy-for-small-polyps/>,
<http://www.choosingwisely.org/clinician-lists/american-college-surgeons-colorectal-cancer-screening-every-ten-years/>,
<http://www.choosingwisely.org/clinician-lists/american-college-surgeons-colorectal-cancer-screening-tests/>

MBS data	2004-05	2014-15	Increase (number)	Increase (%)
Number of services	78,319	192,498	114,179	146%
Benefits paid	\$6,259,548	\$16,784,917	\$10,525,369	168%

- Bone Mineral Density Testing is used to evaluate a person for risk of osteoporosis. MBS item 12323 provides for testing of people over 70 without any underlying risk factors. There is no limit on the number of times a person may have this test.
- Choosing Wisely campaigns⁷ internationally have reported that there is limited value for patients in having frequent tests for Bone Mineral Density. This is supported by academic studies⁸.
- However, some patients are receiving the service frequently.
- Medicare data shows that some people are having four times as many services than is beneficial (14 patients had 4 or more services between 1 July 2013 and 30 June 2015).
- In 2014-15, 192,498 people over 70 claimed this item, an increase of 16.4% in one year.

⁷ <http://www.choosingwiselycanada.org/recommendations/family-medicine/>

⁷ <http://www.choosingwiselycanada.org/recommendations/rheumatology/>

⁷ <http://www.choosingwiselycanada.org/recommendations/nuclear-medicine/>

⁷ <http://www.choosingwiselycanada.org/materials/bone-density-tests-when-you-need-them-and-when-you-dont/>

⁸ Hillier TA, Stone KL, Bauer DC, et al. Evaluating the value of repeat bone mineral density measurement and prediction of fractures in older women: the study of osteoporotic fractures. Arch Intern Med 2007; 167:155