



Kirontech

Spinal Surgery Medical Claims Payment Integrity Report

prepared for

**The Australian Broadcasting
Corporation - 4 Corners Program**

FEBRUARY 2024

AUTHORS:

Dr. Margaret Faux, PhD LLB RN

Dr. Simon Peck, MBBS

Contents

Executive Summary	1
Introduction and Background	1
High Level Findings.....	2
Examples.....	4
What Does it Cost and Who Pays?	7
The Detail in the Data.....	7
Healthcare Fraud, Waste and Abuse in Numbers	7
Approaches to Tackling Healthcare Fraud, Waste and Abuse.....	8
The Impact on the Private Health Insurers	9
Recommendations	10
Conclusion.....	11
Representative Cases	12
Introduction and Background	18
Methodology and Approach	19
Consultations with Clinicians	20
Resources and Materials	22
Regulations and Assumptions	23
Overarching Medicare and PHI Billing Regulations and Rules	23
Spinal Fusion Billing.....	24
Anaesthetic Billing.....	26
Intensive Care Billing	32
Fluoroscopy Items 60506 and 60509	32
Physician Billing.....	33
Data Overview	34
Fund 1 Findings	35
Fund 2 Findings	42
Fund 3 Findings	44
Fund 4 Findings	52
Fund 5 Findings	56
Fund 6 Findings	57
Miscellaneous Fraud, Waste and Abuse	58
Conclusion	60
Limitations	62
Opportunities for Further Analysis and Reform	63
Appendices	65

List of Figures

Figure 1 - Repeat surgeries analysis	4
Figure 2 - Spinal fusion rates for low back pain.....	6
Figure 3 - Surgery allegedly performed incompatible with billed anaesthetic time	12
Figure 4 - Anaesthetic time of 3:21 - 6:20 hours when surgery took less than 1 hour.....	13
Figure 5 - Concerning use of invasive monitoring by anaesthetists	14
Figure 6 - Anaesthetists billing for advanced spinal surgery that was not advanced	15
Figure 7 - Implausible billing of item 132, 133 and 834	16
Figure 8 - Discharges direct from intensive care	17
Figure 9 - MBS spinal fusion rule	24
Figure 10 - ICD codes for low back pain.....	25
Figure 11 - MBS pre-anaesthetic consultation rules	26
Figure 12 - MBS anaesthetic start and finish rule	26
Figure 13 - MBS advanced spinal surgery rule	27
Figure 14 - Harrington Rods and advanced spinal fusion x-rays	27
Figure 15 - A spinal fusion x-ray that is not advanced surgery	28
Figure 16 - MBS invasive monitoring rules.....	28
Figure 17 - MBSRTAC recommendations to remove MBS invasive monitoring items	29-30
Figure 18 - MBS anaesthetic modifier rules	31
Figure 19 - MBS intensive care rules	32
Figure 20 - MBS item 60506 and 60509 rules.....	32
Figure 21 - Data overview	33
Figure 22 - Fund 1, item 60506 and anaesthetic time mismatches.....	35
Figure 23 - Fund 1, item 60506 and anaesthetic time mismatches sliding scale.....	36
Figure 24 - Fund 1, surgery performed incompatible with anaesthetic time	37
Figure 25 - Fund 1, anaesthetists billing for advanced surgery that was not advanced.....	37
Figure 26 - Fund 1, implausible billing of items 132, 133 and 141 by physicians	38
Figure 27 - Fund 1, concerning use of invasive monitoring by anaesthetists	38
Figure 28 - Fund 1, detailed invasive monitoring by anaesthetists	39
Figure 29 - Fund 1, long pre-anaesthetic consultations	39
Figure 30 - Fund 1, young patients having long pre-anaesthetic consultations	40
Figure 31 - Fund 1, discharging patients direct from ICU	40
Figure 32 - Fund 1, spinal fusions for low back pain.....	41
Figure 33 - Fund 2, questionable post-op admissions to ICU	42
Figure 34 - Fund 2, spinal fusions for low back pain	43
Figure 35 - Fund 3, item 60506 incompatible with anaesthetic time	44
Figure 36 - Fund 3, details of item 60506 and anaesthetic time mismatches	44
Figure 37 - Fund 3, surgery performed and anaesthetic time mismatches.....	45
Figure 38 - Fund 3, a very fast spinal fusion surgery	46
Figure 39 - Fund 3, further examples of surgical and anaesthetic time mismatches.....	46
Figure 40 - Fund 3, anaesthetists claiming long pre-anaesthetic consultations	46
Figure 41 - Fund 3, examples of long pre-anaesthetic consultations.....	47
Figure 42 - Fund 3, anaesthetists billing advanced surgery that was not advanced	48
Figure 43 - Fund 3, implausible billing by physicians.....	48
Figure 44 - Fund 3, concerning use of invasive monitoring by anaesthetists	48
Figure 45 - Fund 3, examples of invasive monitoring	49
Figure 46 - Fund 3, patients discharged directly from ICU	50
Figure 47 - Fund 3, spinal fusion for low back pain	51
Figure 48 - Fund 4, item 60506 and anaesthetic time mismatches	52
Figure 49 - Fund 4, use of long pre-anaesthetic consultations	52
Figure 50 - Fund 4, examples of long pre-anaesthetic consultations.....	53
Figure 51 - Fund 4, advanced spinal surgery item for surgery that was not advanced.....	53
Figure 52 - Fund 4, questionable billing by physicians	53
Figure 53 - Fund 4, invasive monitoring by anaesthetists	54
Figure 54 - Fund 4, examples of invasive monitoring	54
Figure 55 - Fund 4, discharges direct from ICU.....	55
Figure 56 - Fund 6, spinal fusion for low back pain.....	57
Figure 57 - Miscellaneous fraud, waste and abuse	59

Acronyms and Abbreviations

ABC	Australian Broadcasting Corporation
ALIF	Anterior lumbar interbody fusion
CVP	Central Venous Pressure
DRG	Diagnosis Related Group
ECG	Electrocardiograph
FWA	Fraud, waste, and abuse – exclusively in healthcare
GP	General Practitioner
HIA	<i>Health Insurance Act 1973 (Cwth)</i>
ICD	International Classification of Disease Code – Australian modification
ICU	Intensive Care Unit
IV	Intravenous
LOS	Length of Stay– the number of days a patient stayed in hospital
MBS	Medicare Benefits Schedule
MBSRTAC	MBS Review Taskforce Anaesthesia Committee
NHS	National Health Service – the health system of the United Kingdom
PDX	Principal diagnosis
PHA	Private Healthcare Australia
PHI	Private Health Insurer/ance
PHIA	<i>Private Health Insurance Act 2007 (Cwth)</i>
PSR	Professional Services Review Agency

Executive Summary

Introduction and Background

This report has been prepared for the Australian Broadcasting Corporation to assess payment integrity for spinal surgery billing as part of a broader project into chronic low back pain.

Chronic low back pain is one of the most common health problems in the world and the number one cause of disability and lost productivity. It is a trend that has grown over the past few decades.¹

Spinal surgery is one of the more common surgeries in Australia, funded by Medicare, the Department of Veterans Affairs, Private Health Insurers, workers compensation schemes, and out of patient's own pockets. The Australian health system allocates billions of dollars a year to spinal surgery and related procedures.²

Low back pain can lead to ineffective and sometimes harmful procedures, like surgery when it is not clinically indicated, painkillers, stimulators, and injections. There has been a great deal of research done on low value care, the definition of which is use of an intervention where evidence suggests there will be little or no benefit to patients, or the risk of harm exceeds the benefits, but is done anyway.³

Less research has been done on measuring fraud, waste, and abuse in this area. For the purposes of this report, we have adopted the international definitions of fraud, waste and abuse in healthcare, as described by the Office of the Inspector General in the USA.⁴

The aim of this project was to do a deep dive into private health insurance inpatient billing to detect any red flags, trends or areas that should be further investigated, and any reforms that could help restore trust in our medical payments system.

Six private health funds representing 25% of the private health insurance market provided billing records of 23,635 patients who had undergone spinal surgery, mostly spinal fusions and decompressions, between November 2017 and May 2023. The value of the surgeries was \$647 million. The private insurers and Medicare paid this amount, which was made up of claims made by both medical practitioners and hospitals.

Using a team from Synapse, a medical billing and coding group, and UK-based software company Kirontech, which specialises in detecting fraud, waste, and abuse in medical payments systems, we analysed 79,725 lines of data that was provided to us. The data was imported into Kirontech's proprietary fraud, waste, and abuse detection software for analysis, while Synapse ran a parallel manual process across the same datasets using their specialist team of billers, coders, and analysts. Findings were validated and cross checked between the two teams.

1. Deloitte. The cost of pain in Australia. <https://www.deloitte.com/au/en/services/economics/analysis/cost-pain-australia.html>

2. Ibid

3. Ian A Scott, Adam G Elshaug and Melissa Fox. Low value care is a health hazard that calls for patient empowerment. Med J Aust 2021; 215 (3): doi: 10.5694/mja2.51168

4. Fraud, waste, and abuse for healthcare providers. <https://oig.hhs.gov/fraud/medicaid-fraud-control-units-mfcu/> **Fraud** is an intentional or deliberate act to deprive another of property or money by deception or other unfair means. The ways in which fraud occurs are as unique as the individual perpetrators, their motives, and the situations they exploit. For the purposes of this training, fraud is intentionally submitting false information to the Government (including situations in which you should have known the information was false) to get money or a benefit. Waste includes practices that, directly or indirectly, result in unnecessary costs to federally funded programs, such as overusing services. **Waste** is generally not considered to be caused by criminally negligent actions but rather by the misuse of resources. Abuse includes actions that may, directly or indirectly, result in unnecessary costs to federally funded programs. **Abuse** involves paying for items or services when there is no legal entitlement to that payment.*

High Level Findings

Our findings point to an alarming trend suggesting our health system is being drained. The most obvious ways this is occurring are:

1. Billing for services that were not provided.
2. Billing for longer services than those provided.
3. Billing for more complex services than those provided.
4. Billing add-on services that were not done. For example, billing an extra item for a bone graft but not doing the bone graft, or billing for a 3-level spinal fusion but only fusing 2-levels.
5. Admitting patients to intensive care units who don't need to be there.
6. Providing and billing for services that patients don't need, and which can be harmful.
7. Double dipping. For example, billing your time and then billing extra services during that time.
8. Billing for spinal fusions in clear breach of a specific Medicare rule.
9. Concerning use of invasive monitoring by anaesthetists.
10. Implausible billing of high paying Medicare items by physicians and geriatricians.

While data driven, our analysis enabled us to reach consensus that there was a serious problem with fraud, waste, and abuse in spinal surgery in Australia. The data sample represented 25% of the private health insurance market and was therefore representative.

The problems we identified were all-pervasive and affect many different areas of billing, which suggests to us that there may be a culture of reckless billing and wasteful resource use, as well as structural enablers in which bad behaviour is able to flourish.

Our analysis suggests the main perpetrators of the fraud, waste and abuse in this data were surgeons, who drive most of the costs, and anaesthetists.

We commenced with an analysis of the fund 1 data and found that 86.82% of anaesthetists billed a longer anaesthetic time than was compatible with the times recorded by others in the operating theatre and the surgery performed. 68.36% of anaesthetists billed for advanced spinal surgery that was not advanced, surgeons performed advanced surgery in implausibly short times when compared to the times recorded by others in the operating theatre, patients were being discharged home directly from intensive care units after an overnight stay, 5.53% of patients had spinal fusion surgery for low back pain in breach of a Medicare rule at a cost of \$20 million, and an average of 11.42% of patients had repeat spinal surgeries within one year suggesting their first surgery didn't work and may not have been clinically necessary. The threshold legal standard before any service can be billed to Medicare and the private funds is that it must be clinically necessary. Some patients had 5 operations on their backs, and one had seven.

These concerning trends and patterns were repeated in each of the remaining five data files.

The project team reached consensus that the rate of losses in this data from fraud, waste, and abuse equates to more than 20 percent, but it could be much higher. It is not possible to precisely quantify the breakup of fraud, versus waste and abuse but this is immaterial to overall loss rates.

It is also important to note that our analysis did not include patient out-of-pocket costs. Given these patients were all privately insured, we expect that many would have been charged illegal out-of-pocket fees by their surgeons and anaesthetists.⁵ For example, it is a criminal offence to bulk bill and charge a separate gap when billing to Medicare,⁶ and it is usually a breach of contract to charge booking, administration, and facility fees to patients prior to their surgery, particularly when using private health insurance no-gap and known-gap schemes.⁷ Yet we know this conduct is prevalent among surgeons and anaesthetists.⁸ If this were added, our estimate would be higher.

5. Sydney Morning Herald. Mind the gap: At 40, Medicare feels the pain of age as patients pay more. <https://www.smh.com.au/politics/federal/mind-the-gap-at-40-Medicare-feels-the-pain-of-age-as-patients-pay-more-20240120-p5eytd.html>

6. *Suman Sood v R* [2006] NSWCCA 114 https://www.austlii.edu.au/cgi-bin/viewdoc/au/cases/nsw/NSWCCA/2006/114.html?context=1;query=sood%20%202006%20%20NSWCCA:mask_path and also *Dalima Pty Limited v Commonwealth of Australia* Unreported, NSWSC, No 25304/87, 22 October 1987

7. This depends on the terms and conditions of each PHI, but all PHIs prohibit these types of charges in their current T&Cs.

8. Sydney Morning Herald. Mind the gap: At 40, Medicare feels the pain of age as patients pay more. <https://www.smh.com.au/politics/federal/mind-the-gap-at-40-Medicare-feels-the-pain-of-age-as-patients-pay-more-20240120-p5eytd.html>

Examples

Surgeons performing surgery in implausibly short times

Surgeons performing surgery in implausibly short times We found examples of surgeons performing surgeries in an implausibly short time when measured against the time recorded by the anaesthetist and radiologist for the same operation. One 70 y.o female allegedly had all the below procedures done in approximately 30 minutes:

1. A single level spinal decompression
2. Fixation of motion segment with vertebral body screw, pedicle screw or hook instrumentation including sublaminar tapes or wires
3. A spinal fusion

According to the surgeons we consulted, it would be almost impossible to do all of this in half an hour, suggesting the surgeon may have billed for surgeries that were not performed.

It should be noted that in two recent case reports of the Professional Services Review Agency (the Medicare watchdog), orthopaedic surgeons were found to have billed for add-on services such as bone grafts where there was insufficient evidence to prove that they were done. The surgeons were required to repay the money for those services.⁹

There were many similar examples where surgeons billed for extensive spinal surgeries in implausibly short times. This was easily detected when we had the time recorded and billed by the anaesthetist for the same operation as well as the radiology time. The anaesthetic time is always longer than the surgical time, so when an anaesthetist bills a 2-hour anaesthetic time we know the surgery had to take well under 2-hours.

Anaesthetists billing inexplicably long anaesthetic times

The reverse was also common, where a surgeon appeared to have correctly billed a minor spinal surgery that took less than an hour, which was confirmed by a radiology time, but the anaesthetist billed an inexplicably long anaesthetic time. This is very easy for anaesthetists to do because the Medicare system remunerates anaesthetists' time in 10 and 15 minute increments. The longer the anaesthetic, the bigger the claim.

In one case the data showed an anaesthetist in a private hospital in NSW claiming a 14-hour anaesthetic time on a 63 y.o male undergoing a 3-level spinal decompression and fusion, while others involved in the same surgery claimed the procedure lasted less than an hour.

The additional cost to Medicare and the PHIs was over \$2,500 just for the anaesthetist.

More common were discrepancies of 3-6 hours of anaesthetic time when others in the same operating theatre stated the procedure lasted less than an hour. Again, the private insurers and Medicare were billed for the longer anaesthetic time.

Anaesthetists billing for advanced surgery that was not advanced

The incidence of anaesthetists claiming that patients were having advanced spinal surgery when they were not (as per Medicare rules) was prolific as was their use of long/complex pre-anaesthetic consultations for patients who were unlikely to have needed them.

Notably, the national hospital procedure data for the 2021-2022 year¹⁰ records 3254 spinal fixation surgeries involving 3 or more spinal levels, many of which would have been done in public hospitals and therefore not billed through the MBS. Yet the national MBS data for the same period¹¹ records anaesthetists claiming that 10,082 allegedly advanced spinal surgeries took place. This huge mismatch supports our results that over 70% of MBS item 20670 (advanced spinal surgery) were likely incorrect.

9. PSR Case Outcomes September 2023 and July 2023 at <https://www.psr.gov.au/case-outcomes>

10. <https://www.aihw.gov.au/reports/hospitals/procedures-data-cubes/contents/summary>

11. http://medicarestatistics.humanservices.gov.au/statistics/mbs_item.jsp

Unnecessary admissions to intensive care

We also found a small concentration of two private hospitals in NSW where there appeared to be a pattern of all patients being admitted overnight to an intensive care unit (ICU) when all other indications suggest the patients didn't need to be there and were unlikely to have met Medicare requirements for ICU billing. The cost of an ICU bed can be more than four times the cost of a standard ward bed. These patients were discharged home directly from their ICU bed the day after their surgery.

11.5% repeat spinal surgery within one year

A finding of particular concern was the number of patients having repeat spinal surgery within one year. The overall incidence of this phenomenon was 11.5 percent. In one dataset it was more than 14 percent (figure 2). Most repeat patients had two surgeries, but some had as many as seven operations on their spine, and the average length of time between surgeries was 335 days. This does not compare favourably with the 1-year revision rates for hip replacements (1.6%) and knee replacements (1.2%).¹²

Importantly, revisions of previous spinal fusion surgery are covered by two Medicare items – 51140 and 51141. If these items are **not** billed, it often indicates the repeat surgery was performed on a different level of the spine from the first surgery – so above or below the first surgery. We found that 82% of repeat surgery patients **did not** have revision surgery, but instead appeared to have had new surgery on a different part of their spine. This may suggest that the initial surgeries on these patients did not work and may not have been clinically necessary, and the repeat surgeries may be compounding rather than solving their problems. It is not possible to know how many repeat surgeries were necessary but those that did not meet the threshold legal standard of clinical necessity should not have been billed to Medicare and the private insurers, and therefore represent waste and/or abuse. This principle has been repeatedly confirmed by the Professional Services Review Agency, who require medical practitioners to repay all money paid if the services performed were not clinically indicated. In one recent example, in which an orthopaedic surgeon was required to repay \$233,000, the PSR stated:

*"not all services rendered by the practitioner were clinically indicated, including major bone grafting surgeries."*¹³

Figure 1 - Repeat surgeries analysis

REPEAT SURGERIES ANALYSIS	FUND 1	FUND 2	FUND 3	FUND 4	FUND 5	FUND 6	OVERALL
Total number of patients	6455	846	1018	707	2925	11684	-
Number of patients with repeat surgeries	737	122	116	70	329	1359	-
% patients with repeat surgeries	11.42%	14.42%	11.39%	9.90%	11.25%	11.63%	11.56%
Days between surgeries (avg)	315	356	349	374	393	325	335

12. National Joint Replacement Registry data <https://aoanjrr.sahmri.com/>

13. PSR case reports September 2023 <https://www.psr.gov.au/case-outcomes/psr-directors-update-september-2023>

Questionable differences between spinal surgery performed in public versus private hospitals

We found a notable difference between spinal surgery performed in public versus private hospitals. While not all datasets included this level of detail, across those that did, 96.5% of patients (18,280) had their surgery in private hospitals and 3.5% (639) in public hospitals.¹⁴ This was unsurprising given this was PHI data and it would be expected that most patients would be operated on in private hospitals. However, while our public hospital sample size was small, we noticed that unlike many of the surgeries performed in private hospitals, more of the surgeries performed in public hospitals appeared to be clinically necessary, based on the patient's principal diagnosis.

The 639 patients who had their surgery in a public hospital had elected to be treated as private patients during their admission, which is an available option. However, what caused us to expand our analysis of their admissions was their different diagnosis profile. Less of these patients appeared to be having spinal surgery for vague things like low back pain. Their diagnosis code often suggested the reasons they were undergoing spinal surgery were necessary, such as for a serious lesion of the spinal cord or a spinal abscess. Examples of some of the diagnosis codes used for public hospital patients compared to private hospital patients are included in the annexures to this report.

Though beyond the scope of this project, we recommend that further analysis of this finding be undertaken to comprehensively compare the reasons why patients are having spinal surgery in public hospitals compared with private hospitals.

This recommendation is based around the proposition that if spinal surgery is widely accepted by the medical profession as the best, evidence-based treatment for low back pain, then, just as hip replacements for hip pain are available to all Australians irrespective of their insurance status, we would expect to see public hospitals performing spinal fusions for low back pain at comparable rates to private hospitals. If public hospitals are not offering this, we need to know why.

Australia's health system is designed to provide equal access to necessary health services, irrespective of ability to pay. So, if public hospitals are not providing a proven, effective, and necessary service, it may suggest that approximately half of Australians who do not have private insurance are missing out on spinal surgeries that can cure their back pain.

Patients having spinal fusion for low back pain in breach of a Medicare rule

We also ran a query to find out how many patients had lumbar spinal fusions with a diagnosis of low back pain and found an average of seven percent across all data files. These were billed to Medicare and the private insurers (figure 2), which is not permitted. The relevant rule states:

"TN 8.141. Interpretation of Spinal Fusion

Lumbar spinal fusion may not be claimed for chronic low back pain for which a diagnosis has not been made."

This means that neither Medicare nor the PHIs should have paid for these claims which had a value of over \$61 million.

This result could partly be explained by poor clinical documentation, where the medical practitioners failed to document a clinical indication for surgery, or poor clinical coding practices at the hospital which have inflated this result. However, the result is concerning and should be investigated further.

Also noteworthy is the ineffectiveness of the rule and our suggestion that, if Medicare changed it and required a diagnosis, surgeons would likely provide one. We therefore suggest that an entirely different approach to rules of this nature is required such as is the case in other countries where certain diagnosis codes block payment for certain surgeries.¹⁵

14. See figure 21. Excluded from this calculation are the 66 patients who were operated on in both public and private hospitals.

15. Drs. Faux and Peck work in other countries where ICD codes are inserted into healthcare bills enabling rules to be applied that block payment. There are over 60 countries using ICD based billing systems.

Figure 2 - Spinal fusion rates for low back pain

ICD CODES	MBS ITEM (FUSION)	FUND 1			FUND 2			FUND 3			FUND 4	FUND 5	FUND 6		
		Number PTS billed (ICD & Fusion)	Total number of patient in the data set	% (ICD & Fusion)	Number PTS billed (ICD & Fusion)	Total number of patient in the data set	% (ICD & Fusion)	Number PTS billed (ICD & Fusion)	Total number of patient in the data set	% (ICD & Fusion)			Number PTS billed (ICD & Fusion)	Total number of patient in the data set	% (ICD & Fusion)
M511	51022										Multiple DX – unable to obtain information				
M513	51023														
M543	51025														
M544	51026														
M545	51041														
M5486	51042														
M5487	51043	357	6455	5.53%	77	849	9.07%	60	1018	5.89%			882	11684	7.55%
M5488	51044														
M5495	51045														
M5496	51061														
M5497	51062														
M5499	51063														
	51064														
	51065														
PL cost			\$8,422,372.00			\$1,589,574.00				\$-				\$21,956,599.92	
Non- PL cost			\$11,453,228.77			\$1,136,678.48				\$413,136.76			\$16,341,039.91		
Total Benefit			\$19,875,600.77			\$2,726,252.48				\$413,136.76			\$38,297,639.83		

Total patient billed across all funds (with DX & fusion)	1376
Total patient across all data set	20006
% of DX & fusion	6.88%
Total cost	\$61,312,629.84

Miscellaneous fraud, waste and abuse

There were myriad other anomalies and areas of concern.

One 82 y.o female undergoing a spinal injection procedure allegedly had a bone graft procedure at the same time, which makes no sense. Further, while the billing indicated the bone graft was done (it was billed and paid) the graft did not appear to have been inserted anywhere.

One physician was a frequent flyer user of the high paying resuscitation items 160 and 161 where the patient is in imminent danger of death and the practitioner remains in attendance for between 1-3 hours to save their life. The absence of associated intensive care claims by others suggested these services were unlikely to have been provided or were not necessary. This physician was also a frequent user of other high paying MBS items.

Other physicians, including geriatricians, billed high paying items for services that could not possibly have been provided.

There was also a concerning prevalence of young patients having chest x-rays after a single level decompression on their lower back. This is unusual, particularly given these patients had short, uncomplicated hospitalisations of 1-2 days. We suggest this requires further investigation.

What Does it Cost and Who Pays?

Spinal surgery is expensive. Each spinal fusion costs tens of thousands of dollars depending on the number of levels fused and other factors.

The payors for the spinal surgeries we analysed were Medicare and the private health insurers.

When a privately insured patient is admitted to a private hospital in Australia, the bills generated from that admission are complex and often confusing. But, put simply, it works like this:

1. Each medical practitioner issues their own bill and receives payment from Medicare and the private insurers, plus any out-of-pocket costs they charge to the patient.
2. The hospital issues a separate bill to the private health insurer only (no Medicare) to cover the accommodation, operating theatre fees, and prostheses costs.
3. The medical practitioners put MBS codes on their bills.
4. The hospital bill uses different codes and descriptions with or without MBS codes depending on contracts.
5. Importantly, anything Medicare pays, the private insurers have to pay too, with very few exceptions.

The Detail in the Data

There are approximately 5,800 current MBS codes and the data provided to us included 1,247 of those, representing approximately 20% of the total available MBS codes. In our experience, this is a much higher number of codes than is usual when conducting FWA projects, which are often restricted to a smaller subset. For example, in this investigation, instead of being provided with just the spinal surgeon's MBS codes, in three of the datasets we were given comprehensive patient level data which included all paid claims for all medical practitioners who had treated each patient during their hospitalisation. This included their spinal surgery, as well as their pre and post-operative care. This enabled us to see what each medical practitioner had billed for the same patient during their hospitalisation and cross-check each medical practitioner's claims to detect mismatches and discrepancies.

Healthcare Fraud, Waste and Abuse in Numbers

The World Health Organisation has estimated that between 20% and 40% of all health spending is wasted.¹⁶ Kirontech is a UK-based organisation working in numerous international healthcare markets and regularly identifies potential FWA in client data in the range of 20-30%. A leading healthcare fraud investigator from Harvard University, Professor Malcolm Sparrow, has estimated that the rates of FWA in the USA could be over 30%,¹⁷ and in one study, the measurable rate of overuse of medical services in Australian public hospitals was over 30%.¹⁸ Internationally, overuse rates as high as 89%

16. World Health Organization 2010, The World Health Report. HEALTH SYSTEMS FINANCING The path to universal coverage. Page vi. <https://www.paho.org/en/documents/world-health-report-2010-health-systems-financing-path-universal-coverage>

17. Professor Malcolm Sparrow. https://scholar.harvard.edu/msparrow/files/fox_business-healthcare_fraud-8-18-2009-edited.wmv.

18. Ian A. Scott, Audit-based measures of overuse of medical care in Australian hospital practice. Internal Medicine Journal 49 (2019) 893-904. <https://pubmed.ncbi.nlm.nih.gov/31295774/>.

have been reported.¹⁹ In addition, Synapse has never found less than 30% of FWA in similar Australian projects. In one project at a public health facility which had an annual turnover of over \$47 million, two members of the Synapse team who were physically onsite personally observed 100% illegal Medicare billing for every patient attending a large department in that facility.²⁰ Furthermore, a recent Australian study found that 29.6% of GP participants committed Medicare fraud “at least once” even when they knew their billing behaviour was being watched.²¹

Approaches to Tackling Healthcare Fraud, Waste and Abuse

Unlike Australia, the PHI markets of other countries such as the UK and USA arguably have a stronger focus on medical payment integrity than Australia. Both the UK’s National Health Service (NHS) and the USA Medicare and Medicaid departments have dedicated fraud units. In addition, the Office of the Inspector General Health and Human Services, the FBI and USA State District Attorney offices have dedicated healthcare fraud teams. In both jurisdictions, perpetrators face custodial sentences for defrauding the healthcare system and there are also mechanisms in place for civil recovery. In Australia, evidence suggests there is little appetite to pursue criminal prosecutions, even when conduct is clearly fraudulent.²²

Australia audits a meagre 0.07% of medical practitioners annually through the Professional Services Review Agency (PSR)²³ and if a practitioner is found to have engaged in what is euphemistically called, inappropriate practice, the practitioner is required to repay the money, is given a tax deduction on that repayment, and can continue practising and often billing, unless the regulator imposes a disqualification from claiming certain MBS item numbers for a period. Having to repay money which should never have been paid in the first place is not an effective deterrent to misconduct.

Finally, it is important to also understand that FWA investigations are complex, requiring a multidisciplinary team with clinical, coding, investigation, and legal skills. It also requires unrestricted access to treatment records (with appropriate privacy safeguards) and access to longitudinal data pertaining to, as a minimum, both the practitioner and the patient.

For example, in one project investigated by a team that included one of the authors of this report, Dr. Simon Peck, a UK medical practitioner was deregistered for his billing of pap smears and colposcopies. A comprehensive analysis of his patient’s journeys revealed that many of the women had a history of having previous Wertheim’s hysterectomy surgery. This operation removes the cervix, rendering both pap smears and colposcopies impossible. However, this practitioner’s bills were continuing to be paid for a long time because by looking at claims in isolation of other factors, these types of services appeared normal and were therefore flying under the radar.

Similarly, in the case of spinal surgery billing, our analysis has demonstrated that the MBS item numbers billed by the spinal surgeon only tell part of the story. Much deeper, contextual analysis is required to reveal the true incidence of fraud, waste and abuse.

19. Evidence for overuse of medical services around the world. Shannon Brownlee, Kalipso Chalkidou, Jenny Doust, Adam G Elshaug, et al. The Lancet, Vol 390 July 8, 2017. [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(16\)32585-5/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(16)32585-5/fulltext)

20. It should be noted that Synapse was satisfied this client did not have the necessary criminal mind to make out fraud, but that did not change the fact that 100% of their billing was illegal, and it had been going on for years. We expect it would be continuing today and will remain invisible and impossible to detect.

21. Under or Over? GP charging of Medicare. <https://www1.racgp.org.au/ajgp/2023/april/general-practitioner-charging-of-Medicare>.

22. Doctors are better off with the PSR than the police: watchdog director. Quinlivan J, former director of the PSR, quoted by Siobhan Calafiore. Australian Doctor News. 9 June 2022. “Then there are doctors who are billing for patients who are not physically present, or services not physically performed. **Really, it’s fraud**, but it’s very difficult. Sometimes we speak to the police and the Department of Health about whether we make these criminal investigations or just administrative. But the current line has been a large majority of the cases has stayed with the PSR for administrative inappropriate practice.”

23. Medicare watchdog investigates just 100 cases of inappropriate billing every 12 months - ABC News

The Impact on the Private Health Insurers

One of the major challenges facing the PHIs are provisions in the *Health Insurance Act 1973* linking the *Private Health Insurance Act 2007 and Regulations*, which effectively force the PHIs to pay claims that Medicare has paid. In other words, if a service is payable by Medicare, the PHIs must pay it too.²⁴

In practice, the way this works is that the medical practitioner bills are usually submitted to the private funds well before the hospital bill, making the medical practitioner bills first in line for payment.

The medical practitioner bills are sent to the private insurers who passes them straight to Medicare for initial review. Once Medicare clears the claim, the PHI receives 75% of the Medicare Schedule Fee, tops it up with their portion and makes one bulk payment to the medical practitioner.

The problem is that Medicare's process for assessing the integrity of each claim before it is cleared involves little more than checking that the patient is Medicare eligible. So, if a private insurer detects or suspects fraud on a claim already cleared by Medicare there is not much they can do other than ask Medicare to investigate. The private insurers are therefore wholly dependent on the federal government to prevent fraud, waste and abuse, and realise savings that could be passed to consumers.

We explored this further by drilling into an issue that we identified around the use of invasive monitoring by anaesthetists, because it raised both patient safety and waste concerns. Invasive monitoring includes inserting lines into the major arteries and veins which is much more dangerous than simple intravenous lines that are very common. We consulted with anaesthetists and read the final report of the MBS Review Taskforce Anaesthesia Committee (MBSRTAC) on this issue, both of which confirmed one of our concerns, which was that anaesthetists are being paid twice for the same service. This occurs because anaesthetists are paid on a time basis but are also able to claim procedure fees for services provided during the time for which they are already being paid.

The MBSRTAC recommended the invasive monitoring items be removed because inserting monitoring lines is now a standard part of common practice that does not justify a separate fee. Under MBS rules, no other medical practitioner can bill an MBS item just for putting in an intravenous line because it is seen as a normal part of common practice not deserving of a separate fee. However, it remains different for anaesthetists. In addition, 100% of invasive monitoring claims are effectively double dipped representing obvious waste. We also found it concerning that the government failed to act on recommendations made by the MBSRTAC in 2017 that would have prevented this from continuing to occur thus protecting the PHIs (and Medicare) from being required to pay.²⁵

24. Key sections of the PHIA are Division 72-1 titled "Benefit requirements" and the table in subsection 2 which links the Medicare benefit and sets minimum amounts the PHI must pay as follows "hospital treatment *covered under the policy for which a *Medicare benefit is payable. (a) if the charge for the treatment is less than the *schedule fee for the treatment—so much of the charge (if any) as exceeds 75% of the schedule fee; and (b) otherwise—at least 25% of the schedule fee for the treatment. And prostheses payments are described in the same subsection as follows, "(a) at least the amount set out, or worked out using the method set out, in the Private Health Insurance (Medical Devices and Human Tissue Products) Rules as the minimum benefit, or method for working out the minimum benefit, for the medical device or human tissue product;"

25. The relevant recommendations are copied in full in the body of this report.

Recommendations

Our analysis has been based purely on data. We did not have access to clinical records nor were we able to speak with patients, both of which are essential components of thorough fraud, waste and abuse investigations. We therefore strongly recommend that further analysis be undertaken to validate our findings, but the evidence was nonetheless compelling, strongly suggesting there is a serious fraud, waste and abuse problem requiring urgent attention.

We offer the following recommendations as a starting point to address the fraud, waste and abuse we have identified:

1. Severing the requirement that the private insurers must automatically pay for any service Medicare has paid. This should include both hospital and medical bills and be done in a way that slows down the payment cycle and gives the funds time to investigate behaviours of concern.
2. Communication and development of an “anti-fraud” culture whereby the perception that “gaming” the system is acceptable is changed in the same way, for example, that has been done with traffic offences such as speeding.
3. The need to provide legal education to medical practitioners on the operation of Medicare and correct use of the MBS cannot be overstated. Currently, there is none.²⁶
4. Clarification of MBS codes where there is scope for genuine misunderstanding and reducing the scope for manipulation of the system. A possible framework for such reform, contextualised within Australia’s unique regulatory environment, is already available in the academic literature.²⁷
5. Adding an additional code to every MBS bill that indicates why the patient is having surgery.²⁸ This will enable the introduction of controls which block payment pre-payment where codes are inconsistent or suggestive of misbilling. This needs to be operated for both Medicare and the private insurers.
6. Regular retrospective analysis of pooled claims data to identify fraud, waste and abuse and make appropriate recoveries but also to identify new trends which then feed new rules and audit work. This needs to be both random and targeted using appropriate analytics and at a level sufficient to deter misbilling. Experience from other jurisdictions suggests that a return on investment of greater than ten times the running cost is achievable.
7. Creation of a specialist team with the appropriate skills, authority, and capacity to audit claims and make recoveries. This would have no net cost as international experience shows that such teams return many times their running costs in savings.
8. Trialing a limited system whereby whistleblowers who report certain types of fraud are paid, using an adapted version of the system in use in the USA.²⁹

26. Who teaches medical billing? A national cross-sectional survey of Australian medical education stakeholders. <https://bmjopen.bmj.com/content/8/7/e020712.share>

27. Ibid. UTS thesis collection. <https://opus.lib.uts.edu.au/handle/10453/155387>. Commencing at page 353.

28. It is not recommended that ICD codes be used for this purpose, but SNOMED codes which are much more granular and already underpin Australia’s digital health strategy.

29. Ibid. UTS thesis collection. <https://opus.lib.uts.edu.au/handle/10453/155387> from page 119. See sections relating to qui tam laws.

Conclusion

There is a commonly held belief in Australia that medical practitioners can be trusted to bill honorably. However, some of the claiming behaviour we observed does not support this view and suggests payment integrity continues to be an issue.

Our findings support the broader reform agenda of the Australian government that the health payments system needs to be reformed to regain trust in the system. Overall, the findings were very concerning, suggesting fraud, waste and abuse, and potential poor practice and safety concerns are prevalent in spinal surgery billing. This is a serious problem that will require commitment at the highest levels of government to tackle. Without it, the fraud, waste and abuse we have reported will certainly continue and is likely to escalate as existing perpetrators continue unchecked, and new medical practitioners entering the industry learn the same bad behaviours from their colleagues.

Representative Cases

Case 1 – Surgery allegedly performed incompatible with anaesthetic time

The below examples suggest that some of the surgeries billed may not have been performed because, based on our consultations with surgeons, as well as comparisons of the average time taken for the same surgeries in the data, even the fastest surgeon would be unlikely to be able do these surgeries in the time taken.

These are all 3-level spinal decompressions with various other procedures including fusions and grafts, where the anaesthetic time billed was 2:30 hours, meaning the surgical time was approximately 2:00 hours.³⁰ We noted that 2:30 hours was the anaesthetic time billed for many of the same surgeries involving 1-level. So, the question is, how many surgeons can do 3-level surgery in the time others do 1-level surgery? It is not possible to know. However, the MBS items tell an important story. The first patient is a good example of misaligned codes raising red flags. The billed fluoroscopy item 60506 indicates the surgery took less than 1-hour, but the anaesthetist item 23111 indicates it took more than double that time, and the surgical items (51013, 51023 and 51033) indicate a 3-level decompression and fusion with bone graft. In a case like this, where the claims don't match, it is possible that both the anaesthetist and surgeon have inflated their claims for financial gain. The more surgical items claimed the more cost to Medicare and the PHIs.

Figure 3 – Surgery allegedly performed incompatible with billed anaesthetic time

LOS	AGE	GENDER	CLINICIAN ID	MBS ITEM USED	NON PL ITEMS MEDICAL
3	25	F	de1841fc...	51013	00111, 17610, 20670, 22012, 22025, 23111, 51013, 51023, 51033 , 51303, 58115, 60506, 65090, 65111, 73938
4	71	M	dafaf78c1...	51013	00110, 00591, 06007, 06009, 13870, 13873, 13876, 13876, 17610, 20670, 22012, 22025, 23111, 51013, 51023, 51043, 51120 , 51303, 60509, 65070, 66512, 66569, 73930, 73930
8	70	F	ca74d8d0...	51012	00104, 00105, 00105, 00105, 00105, 00110, 00116, 00116, 00116, 00116, 00116, 00132, 17610, 20630, 22012, 22025, 23111, 51013, 51022, 51032, 51042, 51120 , 51303, 55848, 55868, 56507, 57712, 57715, 58106, 60509, 65070, 65070, 66512, 66512, 66512, 66512, 66512, 66512, 66512, 66512, 73930, 73930, 73930, 73930, 73930, 73930, 73930, 73930, 73930, 73938
8	67	F	ca74d8d0...	51013	00110, 00110, 00116, 00116, 00116, 00116, 00116, 17610, 20630, 22012, 22025, 23111 , 25000, 51013, 51022, 51032, 51042, 51120 , 51303, 58106, 60509, 65070, 65070, 66512, 66512, 66833, 69333, 69333, 73930, 73930, 73930, 73938, 73938
7	62	M	48945b15...	51013	13870, 13873, 13876, 13876, 17610, 17615, 20320, 20670, 22012, 22025, 23111 , 23230, 25000, 25025, 51011, 51013, 51023, 51043, 51141 , 51303, 58100, 65070, 65070, 66512, 66512, 66566, 66569, 73930, 73930, 73930, 73930
5	74	M	f1ab8b4a6...	51013	00110, 00110, 00116, 00116, 13870, 13873, 13876, 13876, 17615, 20630, 22012, 22018, 22025, 23111 , 25000, 25015, 51013, 51022, 51032, 51042, 51120 , 51303, 58106, 58503, 60509, 65070, 65070, 65070, 65070, 65123, 66512, 66512, 66512, 66512, 66512, 66572, 66578, 69333, 69333, 69354, 73930, 73930, 73930, 73938, 73938, 73938, 73938
5	71	M	ca74d8d0c...	51013	00110, 00110, 00116, 00116, 17610, 20630, 22002, 22012, 22025, 23111, 51013, 51022, 51032, 51042, 51120 , 51303, 58106, 60509, 65070, 65096, 66512, 73930, 73930
2	65	M	09dee7c07...	51013	17610, 20670, 22012, 22025, 23111, 51013, 51023, 51043 , 58100, 60509
3	65	M		51013	17610, 17640, 20600, 22012, 22025, 23111, 51013, 51023, 51043 , 51303, 58100, 60509, 65096, 73930

30. In our assumptions we explain that, after consulting with clinicians, we have consistently assumed the same longer anaesthetic time compared to surgical or "skin-to-skin" time, as it is known.

Case 2 – Anaesthetic time incompatible with surgery performed

Below are 14 examples where the anaesthetic time billed is incompatible with the fluoroscopy time of less than 1-hour and the surgery performed. These anaesthetists have billed inexplicably long anaesthetic times of between 3:21 and 6:20 hours. All patients went home the next day which adds weight to the assumption they were otherwise healthy patients with uncomplicated cases. Further, if these patients were unhealthy and complex, we would have expected to see anaesthetic modifiers billed such as invasive monitoring and ASA codes – there were none. Nor were their ICD and DRGs indicative of complexity. The practitioner with ID #2 was a repeat offender.

Figure 4 – Anaesthetic time of 3:21 – 6:20 hours when surgery took less than 1 hour

S.NO	CLAIM ID (SHORT)	LOS	MBS ITEM	SHORT DESCRIPTION	SERVICE UNITS	TREATING PRACTITIONER ID
1	c0a73159386a	1	23300	6:11 HOURS TO 6:20 HOURS	1	Prac_511
	c0a73159386a	1	51012	Direct spinal decompression	1	Prac_511
	c0a73159386a	1	60506	Fluoroscopy	1	Prac_511
2	2d6454d737aa	1	23180	4:11 HOURS TO 4:20 HOURS	1	Prac_2
	2d6454d737aa	1	51013	Direct spinal decompression	1	Prac_2
	2d6454d737aa	1	60506	Fluoroscopy	1	Prac_2
3	50ce2396f417	1	23170	4:01 HOURS TO 4:10 HOURS	1	Prac_996
	50ce2396f417	1	51011	Direct spinal decompression	1	Prac_996
	50ce2396f417	1	60506	Fluoroscopy	1	Prac_996
4	e08334234138	1	23121	3:51 HOURS TO 4:00 HOURS	1	Prac_945
	e08334234138	1	51014	Direct spinal decompression	1	Prac_945
	e08334234138	1	60506	Fluoroscopy	1	Prac_945
5	22835fc36b7e	1	23119	3:41 HOURS TO 3:50 HOURS	1	Prac_2
	22835fc36b7e	1	51013	Direct spinal decompression	1	Prac_2
	22835fc36b7e	1	60506	Fluoroscopy	1	Prac_2
6	b6fd5f733882	1	23119	3:41 HOURS TO 3:50 HOURS	1	Prac_486
	b6fd5f733882	1	51011	Direct spinal decompression	1	Prac_486
	b6fd5f733882	1	60506	Fluoroscopy	1	Prac_486
7	bda6d0497a10	1	23119	3:41 HOURS TO 3:50 HOURS	3	Prac_160
	bda6d0497a10	1	51011	Direct spinal decompression	1	Prac_160
	bda6d0497a10	1	60506	Fluoroscopy	1	Prac_160
8	fae4435cfad1	1	23119	3:41 HOURS TO 3:50 HOURS	1	Prac_1476
	fae4435cfad1	1	51013	Direct spinal decompression	1	Prac_1476
	fae4435cfad1	1	60506	Fluoroscopy	1	Prac_1476
9	11fbf15e6382	1	23117	3:21 HOURS TO 3:30 HOURS	1	Prac_2
	11fbf15e6382	1	51012	Direct spinal decompression	1	Prac_2
	11fbf15e6382	1	60506	Fluoroscopy	1	Prac_2
10	654d1ae17011	1	23117	3:21 HOURS TO 3:30 HOURS	1	Prac_2
	654d1ae17011	1	51011	Direct spinal decompression	1	Prac_2
	654d1ae17011	1	60506	Fluoroscopy	2	Prac_2
11	926c941358fa	1	23117	3:21 HOURS TO 3:30 HOURS	1	Prac_100
	926c941358fa	1	51011	Direct spinal decompression	1	Prac_100
	926c941358fa	1	60506	Fluoroscopy	1	Prac_100
12	d284c7a67419	1	23117	3:21 HOURS TO 3:30 HOURS	1	Prac_1714
	d284c7a67419	1	51011	Direct spinal decompression	1	Prac_1714
	d284c7a67419	1	60506	Fluoroscopy	1	Prac_1714
13	f911bfec39ab	1	23117	3:21 HOURS TO 3:30 HOURS	1	Prac_1251
	f911bfec39ab	1	51011	Direct spinal decompression	1	Prac_1251
	f911bfec39ab	1	60506	Fluoroscopy	1	Prac_1251

Case 3 – Concerning use of invasive monitoring by anaesthetists

As already mentioned, anaesthetists are paid twice (for the time and also for the procedure undertaken in that time) to insert invasive monitoring lines, representing obvious waste. The fact that these services continue to exist enshrines a perverse incentive to bill them whether the anaesthetist has provided the service or not. Neither Medicare nor the PHI can see or check what was or wasn't done in the operating theatre without obtaining the medical records, which is onerous. There is therefore a strong likelihood that some of these claims are fraudulent, where the services were not provided. We base this opinion on the very high prevalence of invasive monitoring in the data and similar findings in the MBSRTAC report. In one dataset, 7% of all invasive monitoring was claimed by one anaesthetist. Often, all other patient metrics (age, surgery performed, MBS items claimed by others, LOS, ICD and DRG) suggested the cases were uncomplicated and invasive monitoring may not have been necessary. Below are examples. All patients are in their 20's and had relatively minor surgery with a short LOS.

Figure 5 - Concerning use of invasive monitoring by anaesthetists

PATIENT ID	LOS	AGE	GENDER	MBS ITEMS
2978e6eb85...	1	25	F	00110, 06007, 17610, 18276, 20630, 22012, 22025 , 23091, 51011, 51303, 60506
2a3ff00d9d...	2	20	M	17610, 20630, 22012, 22025 , 23083, 51011, 51303, 60506
7ac8826659...	2	22	F	00110, 00116, 00116, 17610, 20600, 22012, 22025 , 23111, 51011, 51131, 51303, 58100, 60509
7d6f25f610e...	2	25	M	17615, 18276, 20630, 22012, 22025 , 23075, 25000, 25025, 51012, 51303, 60506
82ad78b6f...	1	20	M	00132, 17610, 20630, 22012, 22025 , 23075, 25000, 51011, 51303, 60509, 65090, 65111, 73930
882233db0...	1	22	M	06011, 17610, 20670, 22012, 22025 , 23061, 51011, 60506
ab4989600...	2	20	M	00110, 00116, 17610, 20670, 22014, 22025 , 23280, 51013, 51303, 60509
b05fefac64...	1	20	F	11705, 17625, 20670, 22002, 22012, 22025 , 22031, 23085, 25000, 51011, 51303, 60509, 65096, 65129, 66512, 73930
b43a77fc62...	1	23	F	17615, 20630, 22012, 22025 , 23065, 51011, 51303, 60509
e72d592a9f...	2	25	M	13870, 13876, 17615, 20670, 22012, 22025 , 23114, 51011, 51021, 51041, 51120, 51303, 56220, 58503, 60509, 65070, 65096, 65123, 66512, 66512, 66566, 73930, 73930

Introduction and Background

This report has been prepared for the Australian Broadcasting Corporation (ABC), who engaged Synapse Medical (Synapse) to undertake a payment integrity review of spinal surgery billings in the context of a broader project investigating chronic low back pain.

We were given billing data from six PHIs representing 25% of the PHI market for 23,635 patients who had undergone spinal surgery, mostly spinal fusions and decompressions, between November 2017 and May 2023. The value of the surgeries was \$647 million.

Synapse operates one of the largest medical billing services in Australia, which incorporates medical billing and coding solutions, services and consulting to public and private hospitals, large corporate organisations, individual medical practitioners, and government agencies. This work includes undertaking similar projects to this, where we are engaged to undertake medical billing compliance audits in a variety of settings.

Some recent examples of our compliance projects are:

1. Analysing 26,582 lines of Medicare claims valued at over \$35 million which spanned a one-year period, and which were billed by over 200 GPs. This project was undertaken for a large private healthcare company to assess Medicare billing compliance in the context of due diligence processes related to a potential acquisition of a GP corporate organisation.
2. Analysing 32,000 lines of medical billing claims for a state workers compensation government organisation who was concerned about fraud and abuse within its scheme.
3. Analysing Medicare claims and associated documents to provide an opinion concerning Medicare billing compliance by a medical practitioner, which included an appearance as an expert witness before a state inquiry.
4. Analysing the full sample of claims seized by the PSR to provide an opinion on Medicare billing compliance as an expert witness.
5. Analysing 7,526 lines of Medicare claims and associated clinical records to provide an expert opinion on billing compliance in current court proceedings.

We invited Kirontech to collaborate with us on this project because their expertise in FWA and unique medical payment integrity software would enable parallel processing, robust validation, and eliminate bias. The Kirontech platform is designed to identify FWA in medical data. Kirontech also has a team of FWA specialists with experience not only in data but also in investigation and turning intelligence about FWA into savings. They operate in the UK, Europe, the Middle East, and Central America, and have also analysed data in the USA.

Neither Synapse nor Kirontech was paid to do this project.

Methodology and Approach

Synapse received the data files on 6 December 2023 and allocated a team of six to work on the project. The project was led by Dr. Margaret Faux, who was assisted by three expert medical billers/analysts, all of whom have extensive medical billing experience and have worked on similar projects. We also had two expert clinical coders on the team, who are specialised in the Australian modification of the ICD10 codes. Our clinical coders have a combined 60 years of clinical coding experience, both as coders and coding educators.

The files provided to us were in excel format, having been extracted from the various systems used by the participating PHIs.

Using a team from Synapse, a medical billing and coding group, and UK-based software company Kirontech, which specialises in detecting FWA in medical payments systems, we analysed the 79,725 lines of data that was provided to us. The data was imported into Kirontech's proprietary FWA detection software for analysis, while Synapse ran a parallel manual process across the same datasets using their specialist team of billers and analysts. Findings were validated and cross checked between the two teams.

In relation to determining whether surgery was performed for low back pain we consulted with our clinical coders extensively to derive a list of 12 common ICD codes that all describe low back pain using various synonyms. For example, the word "dorsalgia" means pain as does "lumbago". The ICD code tells us why the patient had the surgery. We only ran the low back pain query on data where the files indicated clearly that the ICD was the principal ICD (PDX) for the patient. In files where more than one ICD was included for each patient and it was therefore unclear which was the PDX, we did not run the query.

When we ran the query on item 60506 to assess incompatible anaesthetic time, the inclusion criteria were that the patient level claim had to include only one full anaesthetic claim and at least one surgical item excluding item 51303 (this is for the surgical assistant not the surgeon), plus the item 60506 but without item 60509. A complete anaesthetic claim will usually have a minimum of three MBS items, being the pre-anaesthetic consultation, initiation item and time item.

We remained in close contact with Kirontech throughout the project, by email and videoconferencing, sending queries back and forth to cross check findings and discuss possible alternative explanations for everything we found.

The quality of the data was variable. A short overview of the contents and format of each data file is included in the body of this report as well as a summary of the types of queries we were able to run on each. For example, the fund 2 data did not include anaesthetic items, only the spine surgery items, DRGs, ICDs and ICU dates, so we were quite limited in the number of queries we could run. We nonetheless analysed what we could.

Consultations with Clinicians

We consulted three surgeons, two anaesthetists, two pain specialists and one physician during this project, asking them clinical questions only. These medical practitioners spoke with us on condition of anonymity.

We asked the clinicians questions like: How long does it take, on average, to do a single level fusion or decompression (skin-to-skin)? What is the fastest any surgeon could do an ALIF? On average, how much extra time does a decompression and/or graft add to a fusion? What are the time differences between a fast, average, and slow surgeon? How much extra time should we add for the anaesthetic as compared to the surgery? If we know the surgery took less than an hour, is it reasonable to assume the anaesthetic took an hour and a half? Do guidelines exist for the use of invasive monitoring? And there were many more. We are very grateful for their assistance and support.

It should also be noted that both Dr. Simon Peck and Dr. Margaret Faux are trained clinicians. Dr. Peck commenced his medical career working for the NHS in the UK where he initially specialised in anaesthetics before taking up a position in the medical department of AXA Health in the UK, and Dr. Faux practiced as a registered nurse in Australia for over a decade before retraining and qualifying as a lawyer.

Dr. Peck is also a qualified fraud investigator with over 25 years' experience investigating FWA in multiple jurisdictions. He has appeared before parliamentary inquiries and legal proceedings concerning FWA. He established the first private sector investigation team in the UK and has worked on a large number of high profile investigations of healthcare providers. In 2015, his team's work resulted in a change in the law banning the payment of incentives from private hospitals to medical practitioners which appeared to be designed to increase consumption. He has lectured all over the world on the subject of healthcare FWA.

Dr. Faux has a PhD on Medicare claiming and compliance,³¹ and 39 years of uninterrupted experience processing Australian medical bills. She is also the founder and CEO of Synapse, which operates one of the largest medical billing services in Australia and has proprietary Medicare enabled billing software that is registered with Services Australia and listed publicly on the Medicare software vendors list.³² As a result, she and Synapse have deep knowledge of the practical realities of Medicare and PHI billing, as well as technical knowledge of Medicare's online claiming interface. Dr. Faux has also acted as an expert witness in legal proceedings, both civil and criminal, concerning the operation of Medicare and billing compliance.

Brief bios of Drs. Faux and Peck are included in the appendices.

31. Claiming and compliance under the Medicare Benefits Schedule: A critical examination of medical practitioner experiences, perceptions, attitudes and knowledge. UTS thesis collection. <https://opus.lib.uts.edu.au/handle/10453/155387>

32. Services Australia Software Developers for Medicare Online and ECLIPSE. <https://www.servicesaustralia.gov.au/software-developers-for-Medicare-online-eclipse-and-australian-immunisation-register-air>

Our initial scan of the data immediately revealed some obvious trends in anaesthetic billing, so we asked two anaesthetists the following questions:

Question: Is it usual to use invasive monitoring in surgery such as one-level fusions?

Answer: *Anaesthetist 1 - I do not think that this is usual practice.*

Anaesthetist 2 - The number of levels doesn't really impact anaesthetic (=peri op) risk, and many would argue for prone surgery, indirect monitoring can be unreliable, and beat to beat measurement of BP is essential. So, art line I guess is prob standard.

Question: When would **you** insert an arterial line and CVP line?

Answer: *Anaesthetist 1 - major surgery or unfit patient.*

Anaesthetist 2 - Rarely and only in context of expected/anticipated significant bleeding (>10 % say, of blood vol, so =500 ml), or any pt w "significant" cardiac disease. Likely ASA 3 or 4. For CVP, again same group plus anyone with dodgy/difficult venous access.

Question: Is there any explanation that you can think of for the combination of fluoroscopy for a procedure lasting less than an hour and a long anaesthetic time.

Answer: *Anaesthetist 1 - This looks like dubious billing practice to me. I can't think of other reasons.*

Anaesthetist 2 - Difficult induction/uncooperative child/adult and/or anyone w v difficult venous access. Or if there was ++ time taken to insert monitoring.

Question: Barring an emergency such as maybe cauda equina compression what would be your views on operating on a patient with ASA 4 status?

Answer: *Anaesthetist 1 - I think that most surgeons would be very reluctant to perform non-urgent spinal surgery on ASA 4 patients.*

Anaesthetist 2 - I would wager that the patients were not made aware of the assessment of that level of ASA status (ASA class is a physical descriptor, never really intended as a risk score but technically it's a pretty good proxy for elevated risk as you would expect). I think there is almost certainly a lot of "up coding" in the ASA score space.

Resources and Materials

In addition to the clinical consultations, we referred to the following materials in the preparation of this report.

1. Australian Institute of Health and Welfare, procedures data cubes. <https://www.aihw.gov.au/reports/hospitals/procedures-data-cubes/contents/summary>
2. MBS Review Taskforce Final Report Anaesthesia Clinical Committee. <https://www.health.gov.au/resources/collections/mbs-review-final-taskforce-reports-findings-and-recommendations?language=und>
3. MBS Review Taskforce Final Report Spinal Surgery Clinical Committee. <https://www.health.gov.au/resources/collections/mbs-review-final-taskforce-reports-findings-and-recommendations?language=und>
4. MBS Review Taskforce Report Neurosurgery and Neurology Clinical Committee. <https://www.health.gov.au/resources/collections/mbs-review-final-taskforce-reports-findings-and-recommendations?language=und>
5. College of Intensive Care Medicine of Australia and New Zealand, Guidelines on Standards for High Dependency Units for Training in Intensive Care Medicine. <https://www.cicm.org.au/Resources/Professional-Documents>
6. Australian Commission on Safety and Quality in healthcare. Intensive Care Clinical Indicators Use Manual 2011. https://www.safetyandquality.gov.au/sites/default/files/migrated/INTENSIVE_CARE_2011.pdf
7. Australia and New Zealand College of Anaesthetists. PG18(A) Guidelines on monitoring during anaesthesia 2017. Copy provided to us.
8. MBS Online <https://mbsonline.gov.au>
9. *Approach-Related Complications of Anterior Lumbar Interbody Fusion: Results of a Combined Spine and Vascular Surgical Team*. Ralph J. Mobbs, Kevin Phan, Daniel Daly, Prashanth J. Rao, Andrew Lennox. *Global Spine Journal* 2016;6:147-154
10. *Arterial Pressure Monitoring*. Yenly Nguyen; Vaibhav Bora. National Library of Medicine. <https://www.ncbi.nlm.nih.gov/books/NBK556127/>
11. *Estimating Anesthesia and Surgical Procedure Times from Medicare Anesthesia Claims*. Jeffrey H. Silber, M.D., Ph.D.; Paul R. Rosenbaum, Ph.D.; Xuemei Zhang, M.S.; Orit Even-Shoshan, M.S. *Anesthesiology* February 2007, Vol. 106, 346-355. <https://pubs.asahq.org/anesthesiology/article/106/2/346/8053/Estimating-Anesthesia-and-Surgical-Procedure-Times>
12. *Operating room time comparison between spinal and general anesthesia in total knee arthroplasty: an institutional review*. Kelly Chandler, BS, Roshan Jacob, MD, George E. Kuntz IV, MD, Mackenzie Sowers, BS, Gerald McGwin, PhD, Sameer Naranje, MD, Promil Kukreja, MD, Ph.D. *Orthopedic Reviews*, Vol. 13, Issue 2, 2021 September 21. <https://orthopedicreviews.openmedicalpublishing.org/article/28330>

Regulations and Assumptions

Overarching Medicare and PHI Billing Regulations and Rules

Medicare's enabling legislation is the *Health Insurance Act 1973* (HIA). It has been almost 50 years since the scheme was first introduced in 1975 as Medibank (reintroduced as Medicare in 1984), and successive governments have constantly tinkered with the regulatory framework. However, the following core elements of the scheme remain intact and unchanged.

1. Medicare reimburses each **professional service**. A professional service is defined as: "a service (other than a diagnostic imaging service) to which an item relates, being a clinically relevant service that is rendered by or on behalf of a medical practitioner;"
2. A **clinically relevant** service is defined as: "a service rendered by a medical or dental practitioner or an optometrist that is generally accepted in the medical, dental or optometrical profession (as the case may be) as being necessary for the appropriate treatment of the patient to whom it is rendered."
3. The MBS is not an instrument of parliament and therefore not a legal document.³³ It is a departmental interpretation of how the government would like the Medicare scheme to operate. It is basically a user guide. The law that sits beneath the MBS³⁴ and the MBS itself, are often misaligned and sometimes completely contradictory.³⁵ This is relevant in the current context because for example, the MBS states that spinal fusion surgery cannot be claimed to Medicare for patients with chronic low back pain. However, this statement is little more than a type of rule, it is not a law. And the law does not contain this provision.

Flowing from the above are the following overarching concepts.

1. Medicare is a fee-for-service scheme. Every service is distinct and finite. However, pursuant to section 15 (1)(b) of the HIA, when more than one operation is performed on the same patient at the same surgery, the law deems those operations to be one.

"15 Medicare benefit in respect of 2 or more operations

(1) *Subject to this section, for the purpose of ascertaining whether Medicare benefit is payable, or calculating the amount of a Medicare benefit payable, in respect of the medical expenses incurred in respect of two or more operations, each constituting a professional service covered by an item, that are performed on the one occasion on the one person:*

(b) **the operations shall be deemed to constitute one professional service** in respect of which the fee specified in the table in relation to the State in which the service was rendered is an amount equal to the aggregate of the amounts specified as fees in the items relating to those operations, being those amounts as reduced in accordance with paragraph (a)."

This is important for present purposes because many of the spinal surgeries in the data comprise more than one operation on the same patient at the same time. For example, the common combination of items 51011, 51021 and 51041 is one operation not three.

33. The MBS book itself states "This book is not a legal document, and, in cases of discrepancy, the legislation will be the source document for payment of Medicare benefits." See downloads section of the MBSOnline website at this link <https://www.mbsonline.gov.au/internet/mbsonline/publishing.nsf/Content/Downloads-230701>

34. The HIA and associated regulations.

35. Claiming and compliance under the Medicare Benefits Schedule: A critical examination of medical practitioner experiences, perceptions, attitudes and knowledge. UTS thesis collection. <https://opus.lib.uts.edu.au/handle/10453/155387>

2. Every service rendered must be necessary to treat the patient. This requires practitioners to discern MBS items that could be provided but that the patient doesn't need (Eg: I could insert a CVP or arterial line and bill it, but the patient doesn't need it. Or I could do a 10-hour combined anterior and posterior spinal fusion, but the patient only needs a 45-minute decompression). Put another way, the fact that a Medicare service *could* be provided and billed does not mean it *should* be.
3. All requirements of every Medicare item billed must be satisfied every time it is billed. No exceptions.
4. Pursuant to intricate legal provisions linking the HIA with the PHIA and the *Private Health Insurance (Complying Product) Rules 2015*, a PHI with a complying health insurance product must pay hospital claims where a Medicare benefit is payable. In practice this means that medical practitioners submit claims to PHIs using MBS codes and the claims go to both Medicare and the PHI for processing of their respective contributions. The regulated Medicare contribution to every PHI claim is 75% of the Medicare Schedule Fee. Further, if Medicare accepts and pays a claim, the PHI is legally obligated to do the same, subject only to the patient's policy inclusions and financial status. For example, if the patient's policy excludes spinal surgery the PHI is not obligated to pay. However, in practice this would always be checked prior to the patient undergoing surgery. Similarly, if the patient's policy has lapsed due to unpaid membership fees the PHI may not be obligated to pay.
5. Evidence has shown that Medicare regulations and MBS billing rules are prolific (numbering in the millions), vague, highly interpretive, and now completely out of step with other, widely used international clinical vocabulary products³⁶ such as SNOMED-CT³⁷ and the USA CPT codes.³⁸ The opaqueness of the MBS is one of the known contributors to FWA.³⁹

Spinal Fusion Billing

Regulations

There are no specific regulated barriers to a surgeon performing lumbar spinal fusion surgery, however, Medicare imposes a rule which states that spinal fusion may not be claimed for chronic low back pain without a diagnosis.

Figure 9 - MBS spinal fusion rule

Category 3 - THERAPEUTIC PROCEDURES

TN.8.141 Application of items 51011 to 51171 (Sub-group 17)

Spinal surgery items 51011 to 51171 cannot be performed in conjunction with any other item (outside of subgroup 17) in Group T8 of the MBS (surgical operation items 30001 to 50952), when that surgical item is related to spinal surgery. Items 50600 to 50644 - spine surgery for scoliosis and kyphosis in paediatric patients - are excepted from this rule when claimed in conjunction with items 51113 and 51114.

Meaning of Motion Segment

Motion segment is defined as including all anatomical structures (including traversing and exiting nerve roots) between and including the top of the pedicle above to the bottom of the pedicle below.

Combined Anterior and Posterior Surgery

Combined anterior/ posterior surgery items 51061, 51062, 51063, 51064, 51065 and 51066 cannot be claimed with any item between 51020 and 51045 (i.e. items for spinal instrumentation, posterior bone graft and/or anterior column fusion).

Interpretation of Spinal Fusion

Lumbar spinal fusion may not be claimed for chronic low back pain for which a diagnosis has not been made.

Related Items: 51011 51012 51013 51014 51015 51020 51021 51022 51023 51024 51025 51026 51031 51032 51033 51034 51035 51036 51041 51042 51043 51044 51045
51051 51052 51053 51054 51055 51056 51057 51058 51059 51061 51062 51063 51064 51065 51066 51071 51072 51073 51102 51103 51110 51111 51112 51113 51114
51115 51120 51130 51131 51140 51141 51145 51150 51160 51165 51170 51171

← Previous - Note TN.8.140
Next - Note TN.8.142 →

36. Ibid. UTS thesis collection. <https://opus.lib.uts.edu.au/handle/10453/155387>

37. <https://www.snomed.org/>

38. This should not be viewed as an endorsement of the USA CPT codes, but simply recognition that they are drafted in line with international standards for health vocabularies, whereas the MBS is not. It is definitely not recommended that Australia considers adopting CPT codes.

39. Ibid. UTS thesis collection. <https://opus.lib.uts.edu.au/handle/10453/155387>

The following ICD codes represent various ways of describing low back pain. All these codes relate to pain in the lower back except M5499 and M513. M5499 is included precisely because of its vagueness which suggests the hospital records didn't clearly state where the patient's pain was, but our data indicated the patient was operated on anyway. And M513 was included because a patient does not know they have disc degeneration. Their presenting symptom is usually pain.

Figure 10 - ICD codes for low back pain

ICD CODES USED	DESCRIPTION
M511	Lumbar and other intervertebral disc disorders with radiculopathy
M513	Other specified intervertebral disc degeneration
M543	Sciatica
M544	Lumbago with sciatica
M545	Low back pain
M5486	Other dorsalgia, lumbar region
M5487	Other dorsalgia, lumbosacral region
M5488	Other dorsalgia, sacral and sacrococcygeal region
M5495	Unspecified dorsalgia, thoracolumbar region
M5496	Unspecified dorsalgia, lumbar region
M5497	Unspecified dorsalgia, lumbosacral region
M5499	Unspecified dorsalgia, site unspecified

Assumptions

The above 12 ICD codes do not specify chronicity, because there is no specific ICD code for chronic low back pain. We discussed this at length with our clinical coders, who referenced the Australian Coding Standards⁴⁰ and specifically ACS 0001, which sets out the process clinical coders follow when coding underlying causes versus symptoms. Coders are trained to allocate a PDX code relating to what the clinical records indicate the medical practitioners were treating – was it the pain, or the underlying condition causing the pain? Put another way, they code the disease not the symptoms. If a spinal fusion is being performed to treat the underlying condition that is causing the pain, the coders advised one would expect to see a PDX relating to things like cord compression, fractures, or deformities such as kyphosis and spondylosis. There were many of those ICDs in the data. However, if the PDX is one of the above 12 codes, then the surgeon has treated only the pain, for which a spinal fusion is neither indicated nor billable. We also noted that we would have expected to see associated MBS codes associated with the other causes if they existed, which we did not.

We subsequently ran queries against these 12 ICD codes for all spinal fusions and assumed those surgeries should not have been billed to Medicare or the PHIs because they breached the Medicare rule. This is not to say there was any legal barrier to performing the surgery, just that it should not have been billed to the public purse or PHIs.

It should also be noted that our coders advised that one of the most common entries they see in medical records as a reason for admission is "low back pain".

40. IHACPA. Australian Coding Standards, First Edition to Twelfth Edition. ACS 0001, problems and underlying conditions. https://www.ihacpa.gov.au/sites/default/files/2022-12/ACS%20Chronicle_Twelfth%20Edition.PDF

Anaesthetic Billing

Regulations

Pre-anaesthetic consultations

There are four MBS items for pre-anaesthetic consultations, with the most billed of those being item 17610. Item 17610 is the short discussion with the anaesthetist that many Australians would have experienced when having surgery. The other three items have additional requirements around both time and complexity.

Figure 11 - MBS pre-anaesthetic consultation rules

Category 3 - THERAPEUTIC PROCEDURES	
TN.6.1	Pre-anaesthesia Consultations by an Anaesthetist - (Items 17610 to 17625)
Pre-anaesthesia consultations are covered by items in the range 17610 - 17625.	
Pre-anaesthesia consultations comprise 4 time-based items utilising 15 minute increments up to and exceeding 45 minutes, in conjunction with content-based descriptors. A pre-anaesthesia consultation will attract benefits under the appropriate items based on BOTH the duration of the consultation AND the complexity of the consultation in accordance with the requirements outlined in the content-based item descriptions.	
Whether or not the proposed procedure proceeds, the pre-anaesthetic attendance will attract benefits under the appropriate consultation item in the range 17610 - 17625, as determined by the duration and content of the consultation.	
The following provides further guidance on utilisation of the appropriate items in common clinical situations:	
(i) Item 17610 (15 mins or less) - a pre-anaesthesia consultation of a straightforward nature occurring prior to investigative procedures and other routine surgery. This item covers routine pre-anaesthesia consultation services including the taking of a brief history, a limited examination of the patient including the cardio-respiratory system and brief discussion of an anaesthesia plan with the patient.	
(ii) Item 17615 (16-30 mins) - a pre-anaesthesia consultation of between 16 to 30 minutes duration AND of significantly greater complexity than that required under item 17610. To qualify for benefits patients will be undergoing advanced surgery or will have complex medical problems. The consultation will involve a more extensive examination of the patient, for example: the cardio-respiratory system, the upper airway, anatomy relevant to regional anaesthesia and invasive monitoring. An anaesthesia plan of management should be formulated, of which there should be a written record included in the patient notes.	
(iii) Item 17620 (31-45 mins) - a pre-anaesthesia consultation of high complexity involving all of the requirements of item 17615 and of between 31 to 45 minutes duration. The pre-anaesthesia consultation will also involve evaluation of relevant patient investigations and the formulation of an anaesthesia plan of management of which there should be a written record in the patient notes.	
(iv) Item 17625 (more than 45 mins) - a pre-anaesthesia consultation of high complexity involving all of the requirements of item 17615 and item 17620 and of more than 45 minutes duration. The pre-anaesthesia consultation will also involve evaluation of relevant patient investigations as well as discussion of the patient's medical condition and/or anaesthesia plan of management with other relevant healthcare professionals. An anaesthesia plan of management should be formulated, of which there should be a written record included in the patient notes.	

Anaesthetic start and finish time

Medicare imposes a very simple time-based rule to determine when an anaesthetic starts and finishes. The anaesthetic starts with the induction of the patient and finishes at the time of handover to recovery.

Figure 12 - MBS anaesthetic start and finish rule

Category 3 - THERAPEUTIC PROCEDURES	
TN.10.3	RVG Unit Values
As per clause 5.9.5 of Schedule 1 of the GMST, all RVG items 23010 to 24136 apply to a service provided to a patient under anaesthesia, but only if the anaesthesia start and end times are recorded in writing.	
Basic Units	
The RVG basic unit allocation represents the complexity of the anaesthetic procedure relative to the anatomical site and physiological impact of the surgery.	
Time Units	
The number of time units is calculated from the total time of the anaesthesia service, the assistant at anaesthesia service or the whole body perfusion service:	
<ul style="list-style-type: none"> for anaesthesia, time is considered to begin when the anaesthetist commences exclusive and continuous care of the patient for anaesthesia. Time ends when the anaesthetist is no longer in professional attendance, that is, when the patient is safely placed under the supervision of other personnel; 	

The advanced spinal surgery induction item 20670

The Medicare rule for the use of item 20670 is that the spinal surgery must be “major”, and the examples given are below. The rule states that surgery on individual spinal levels does not enable the billing of this item.

Figure 13 - MBS advanced spinal surgery rule

Category 3 - THERAPEUTIC PROCEDURES

TN.10.23 Anaesthesia for Extensive Spine or Spinal Cord Procedures - (Item 20670)

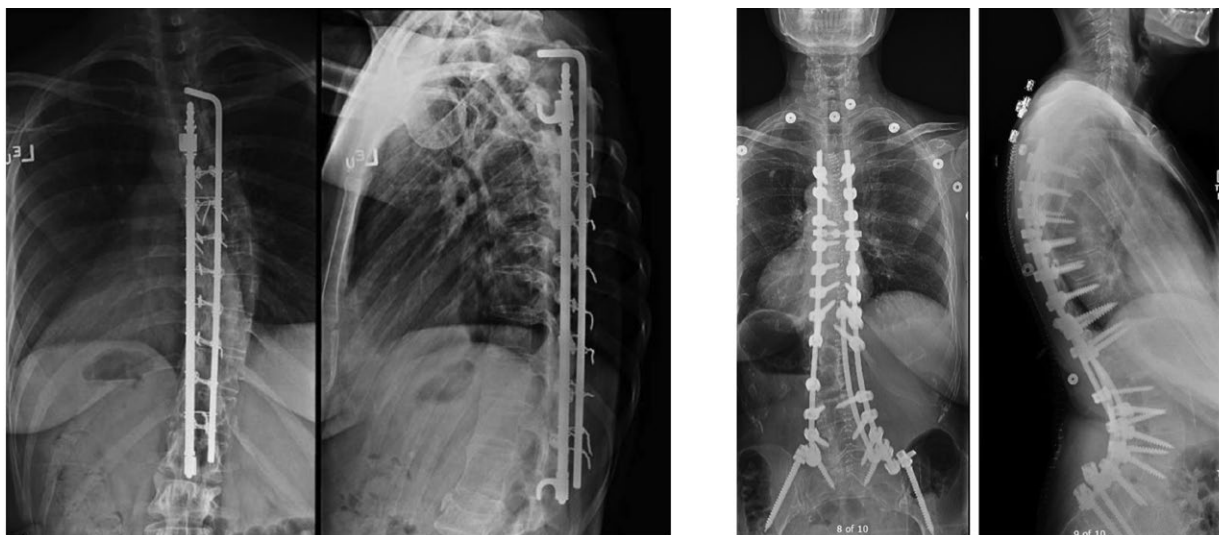
This item covers major spinal surgery involving multiple levels of the spinal cord and spinal fusion where performed. Procedures covered under this item would include the Harrington Rod technique. Surgery on individual spinal levels would be covered under items 20600, 20620 and 20630.

Related Items: 20670

[← Previous - Note TN.10.22](#)
[Next - Note TN.10.24 →](#)

Below are x-rays of major spinal surgery. The first x-ray is Harrington Rods, which Medicare references, and the second is extensive, multi-level spinal fusions.

Figure 14 - Harrington Rods and advanced spinal fusion x-rays



Harrington Rods

Advanced spinal fusion

Even though the Medicare rule does not categorise individual level fusions as “advanced” we adopted a generous position on this rule, because some multi-level spinal fusions are clearly advanced as the above x-ray shows. We therefore ran queries where any surgery up to and including 3 levels was *not* advanced, but 4 or more levels was advanced as was any spinal fusion where an anterior approach was used.

The below x-ray of a 2-level spinal fusion is an example of what would not meet the requirements for item 20670 unless it was clearly done through an anterior approach.

Figure 15 - A spinal fusion x-ray that is not advanced surgery



Invasive monitoring

The Medicare rule for the use of invasive monitoring stipulates that the patients must be at high risk of complications.

Figure 16 - MBS invasive monitoring rules

Category 3 - THERAPEUTIC PROCEDURES

TN.10.8 Additional Services Performed in Connection with Anaesthesia - Subgroup 19

Included in the RVG format are a number of additional or complementary services which may be provided in connection with anaesthesia such as blood pressure monitoring (item 22012) and intra-arterial cannulation (item 22025).

These items (with the exception of peri-operative nerve blocks (22031-22042)) and perfusion services (22055-22075) have also been retained in the MBS in the non-RVG format, for use by practitioners who provide these services other than in association with anaesthesia.

Items 22012 and 22014

Benefits are payable under items 22012 and 22014 only once for each type of pressure, up to a maximum of 4 pressures per patient per calendar day, and irrespective of the number of practitioners involved in monitoring the pressures.

Items 22012, 22014 and 22025

A patient who is categorised as having a high risk of complications is one where clinical indications allow for the following items to be claimed (in conjunction with items 22012, 22014 and 22025) with item 25000, item 25005 or item 25010 modifiers, and/or item 25013, and/or item 25014, and/or items 25020, 25025 and/or when the basic surgical item value is 10 or more units, and/or in conjunction with items in group T10 Subgroup 13 (Shoulder and Axilla), or with items 23170 – 24136 (for procedures of greater than four hours duration) noting this is not an exhaustive list.

Item 22042

This item can be co-claimed with item 20142 (anaesthesia for lens surgery), when anaesthesia or sedation was also provided by the same anaesthetist.

Item 22042 cannot be co-claimed with item 20142, 20144, 20145 and 20147 when a general anaesthetic is the primary anaesthetic approach.

Related Items: 22002 22012 22014 22015 22020 22025 22042

[← Previous - Note TN.10.7](#)

[Next - Note TN.10.9 →](#)

Notably, in 2017 the MBS Review Taskforce Anaesthetic Committee recommended that these items be removed. However, they were not removed and remain billable today. Below are the recommendations from the MBSRTAC copied from the final report.

Figure 17 – MBSRTAC recommendations to remove MBS invasive monitoring items

6.2.6 Intraarterial cannulation

Table 26: Item introduction table for item 22025

Item	Descriptor	Schedule fee	Services FY2015/16	Benefits FY2015/16	Services 5-year annual avg. growth
22025	Intraarterial cannulation when performed in association with the administration of anaesthesia	\$79.20	112,068	\$6,849,804	8.37%

Recommendation 23

△ Delete item 22025.

Rationale

This recommendation focuses on modernising the MBS and improving patient safety. It is based on the following observations.

- △ The Committee agreed that inserting an arterial cannula is within the skill set for standard anaesthesia care, and that the clinician does not experience a significant incremental burden. The procedure does not represent a separate distinct service when performed in association with the administration of anaesthesia, and time items within the anaesthesia RVG account for the additional time required to site an arterial cannula.
- △ The Committee noted high levels of use for item 22025, with service growth exceeding population growth by a considerable margin. For example, 112,068 services were provided in FY2015/16, which represents growth of 8.4 per cent per year over the five-year period since FY2010/11. To provide some points of comparison, all anaesthesia services grew by 3.2 per cent during this period, and the Australian population grew by 1.5 per cent.
- △ Although an arterial cannula (and the associated monitoring and capacity for repeated sampling of arterial blood) can provide useful clinical information, the procedure is not without risk and can have potentially serious adverse consequences (Miller, 2009). Removing any incentive to place an arterial line where it is not clinically required would benefit patient safety.
- △ The Committee agreed that deleting item 22025 would not create issues of patient access because the service is now part of normal clinical practice and clinicians will continue to provide the service where clinically necessary.

Figure 17 continued....

6.2.3 Blood pressure monitoring

Table 23: Item introduction table for items 22012 and 22014

Item	Descriptor	Schedule fee	Services FY2015/16	Benefits FY2015/16	Services 5-year annual avg. growth
22012	Blood pressure monitoring (central venous, pulmonary arterial, systemic arterial or cardiac intracavity), by indwelling catheter - once only for each type of pressure on any calendar day, up to a maximum of 4 pressures (not being a service to which item 13876 applies) when performed in association with the administration of anaesthesia	\$59.40	147,566	\$6,804,021	6.03%
22014	Blood pressure monitoring (central venous, pulmonary arterial, systemic arterial or cardiac intracavity), by indwelling catheter - once only for each type of pressure on any	\$59.40	3,968	\$186,763	-3.58%

Item	Descriptor	Schedule fee	Services FY2015/16	Benefits FY2015/16	Services 5-year annual avg. growth
	calendar day, up to a maximum of 4 pressures (not being a service to which item 13876 applies) when performed in association with the administration of anaesthesia relating to another discrete operation on the same day				

Recommendation 20

- △ Delete items 22012 and 22014.

Rationale

The recommendation focuses on modernising the MBS and improving value for the patient and the health system by removing items that are now part of normal clinical practice (rather than separate, distinct services). It is based on the following.

- △ The Committee noted that technology has changed since the introduction of items 22012 and 22014. As a result, there is no longer a significant incremental burden on clinicians who provide these services, particularly as time items within the anaesthesia RVG account for any extra time required. The activities covered by these items are now a normal part of modern practice and form part of a standard of care that clinicians need to meet.

ASA 3 and 4 modifiers

These modifiers are intended to be used only when anaesthetising very ill patients. One of the anaesthetists we consulted suggested that most surgeons would not even be willing to perform elective, non-urgent spinal surgery on an ASA 4 patient.

Figure 18 - MBS anaesthetic modifier rules

Modifying units have been included in the RVG to recognise added complexities in anaesthesia or perfusion, associated with the patient's age, physical status or the requirement for emergency surgery. These cover the following clinical situations:

ASA physical status indicator 3 - A patient with severe systemic disease that significantly limits activity (item 25000) This would include: severely limiting heart disease; severe diabetes with vascular complications or moderate to severe degrees of pulmonary insufficiency.

Some examples of clinical situations to which ASA 3 would apply are:

- a patient with ischaemic heart disease such that they encounter angina frequently on exertion thus significantly limiting activities;
- a patient with chronic airflow limitation who gets short of breath such that the patient cannot complete one flight of stairs without pausing;
- a patient who has suffered a stroke and is left with a residual neurological deficit to the extent that is significantly limits normal activity, such as hemiparesis; or
- a patient who has renal failure requiring regular dialysis.

ASA physical status indicator 4 - A patient with severe systemic disease which is a constant threat to life (item 25005) This covers patients with severe systemic disorders that are already life-threatening, not always correctable by an operation. This would include: patients with heart disease showing marked signs of cardiac failure; persistent angina or advanced degrees of pulmonary, hepatic, renal or endocrine insufficiency.

ASA physical status indicator 4 would be characterised by the following clinical examples:

- a person with coronary disease such that they get angina daily on minimum exertion thus severely curtailing their normal activities;
- a person with end stage emphysema who is breathless on minimum exertion such as brushing their hair or walking less than 20 metres; or
- a person with severe diabetes which affects multiple organ systems where they may have one or more of the following examples:
 - severe visual impairment or significant peripheral vascular disease such that they may get intermittent claudication on walking less than 20 metres; or
 - severe coronary artery disease such that they suffer from cardiac failure and/or angina whereby they are limited to minimal activity.

ASA physical status indicator 5 - a moribund patient who is not expected to survive for 24 hours with or without the operation (item 25010). This would include: a burst abdominal aneurysm with profound shock; major cerebral trauma with rapidly increasing intracranial pressure or massive pulmonary embolus.

The following are some examples that would equate to ASA physical status indicator 5

- a burst abdominal aneurysm with profound shock;
- major cerebral trauma with increasing intracranial pressure; or

Assumptions

Having considered all the above anaesthetic rules, we applied the following assumptions:

1. Item 17610 should be the default pre-anaesthetic consultation. When we found items 17615-17625, we assessed contextual claims to determine likely complexity and time. For example, for simple fusions with a short LOS we categorised the claim as FWA.
2. We measured start and finish times against numerous other metrics, including fluoroscopy time (under or over 1 hour), surgery performed (simple surgery with long anaesthetics), the principle ICD (was it major surgery for scoliosis or minor for low back pain/disc degeneration), the discharge DRG (the higher the DRG the more complex the case) and LOS (if the patient went home same day or overnight they were uncomplicated).
3. If the surgery was 3 motion segments or less, or was not obviously done through an anterior approach, it was not advanced.
4. We assumed invasive monitoring and ASA 3 and 4 were generally not indicated for simple fusions with a short LOS.

Intensive Care Billing

Regulations

The Medicare rule for the billing of items 13870 and 13873 states that for periods “when patients are in an ICU for very short periods (say less than 2 hours) with minimal ICU management during that time, a fee should not be raised”. In addition, the overarching rule that patients must genuinely need ICU monitoring based on clinical factors continues to apply.

Figure 19 – MBS intensive care rules

Items 13870 and 13873

Medicare Benefits Schedule fees for Items 13870 and 13873 represent global daily fees covering all attendances by the intensive care specialist in the ICU (and attendances provided by support medical personnel) and all electrocardiographic monitoring, arterial sampling and, bladder catheterisation performed on the patient on the one day. If a patient is transferred from one ICU to another it would be necessary for an arrangement to be made between the two ICUs regarding the billing of the patient.

Items 13870 and 13873 should be itemised on accounts according to each calendar day and not per 24 hour period. For periods when patients are in an ICU for very short periods (say less than 2 hours) with minimal ICU management during that time, a fee should not be raised.

Assumptions

We assumed that, while patients having simple spinal fusions might need a short period of ICU monitoring immediately post-operatively, particularly if their surgery was on the cervical rather than the lumbar spine, it is unlikely they would need to stay in ICU overnight.

Fluoroscopy Items 60506 and 60509

Regulations

The two commonly billed MBS fluoroscopy items, 60506 and 60509 have refreshingly clear and straightforward rules, which enabled us to conduct extensive analysis against their requirements. Item 60506 should be billed with a surgical procedure lasting less than 1-hour, and 60509 is for surgery lasting 1-hour or more.

Figure 20 – MBS item 60506 and 60509 rules

Category 5 - DIAGNOSTIC IMAGING SERVICES

60506 ⓘ		Group	13 - Diagnostic Radiology
		Subgroup	15 - Fluoroscopic Examination

Fluoroscopy using a mobile image intensifier, in conjunction with a surgical procedure lasting less than 1 hour, not being a service associated with a service to which another item in this Group applies (R)

Category 5 - DIAGNOSTIC IMAGING SERVICES

60509 ⓘ		Group	13 - Diagnostic Radiology
		Subgroup	15 - Fluoroscopic Examination

Fluoroscopy using a mobile image intensifier, in conjunction with a surgical procedure lasting 1 hour or more, not being a service associated with a service to which another item in this Group applies (R)

Assumptions

We assumed that “less than 1-hour” does not mean 59 minutes. We assumed that most radiologists or surgeons (both can bill these items) would push the time up to item 60509 if they had reached the 59-minute mark. Therefore, when item 60506 has been claimed we assumed the surgery took “comfortably” under 1-hour (around 45-50 minutes).

Physician Billing

Regulations

Physicians have access to certain MBS items that attract high rebates for complex patients. Any medical practitioner who is a fellow of the Royal Australasian College of Physicians can claim these items. This includes, but is not limited to, cardiologists, neurologists, oncologists and haematologists, geriatricians, and rehabilitation physicians.

The items are 132 and 133, which have extremely onerous requirements involving a minimum of 45 minutes face-to-face with the patient (item 132) or 20 minutes (item 133). These items have the following specific requirements and can be billed only to patients with comorbidities requiring ongoing care. The full requirements of these items are in the appendices.

Item 132

- (a) an assessment is undertaken that covers:
 - (i) a comprehensive history, including psychosocial history and medication review; and
 - (ii) comprehensive multi or detailed single organ system assessment; and
 - (iii) the formulation of differential diagnoses; and
- (b) a consultant physician treatment and management plan of significant complexity is prepared and provided to the referring practitioner, which involves:
 - (i) an opinion on diagnosis and risk assessment; and
 - (ii) treatment options and decisions; and
 - (iii) medication recommendations.

Item 133

- (a) a review is undertaken that covers:
 - (i) review of initial presenting problems and results of diagnostic investigations; and
 - (ii) review of responses to treatment and medication plans initiated at time of initial consultation; and
 - (iii) comprehensive multi or detailed single organ system assessment; and
 - (iv) review of original and differential diagnoses; and
- (b) the modified consultant physician treatment and management plan is provided to the referring practitioner, which involves, if appropriate:
 - (i) a revised opinion on the diagnosis and risk assessment; and
 - (ii) treatment options and decisions; and
 - (iii) revised medication recommendations.

Assumptions

We assumed it would be rare for any patient with a 0–2-day LOS having minor surgery to need an item 132. Further we are aware of a recent campaign by Medicare to address overuse of these items in which the department indicated that it would be unusual to review the effectiveness of a management plan within a few days of writing it. We applied the same logic and assumed these items should rarely be billed less than 3-days apart.

Data Overview

The below table summarises the six datasets we analysed. The total number of lines was 79,725 representing claims for 23,635 patients over an approximate 5-year period. It included 1247 unique MBS item numbers and the total amount paid by the PHIs was \$647,920,700.

Figure 21 - Data overview

CATEGORY	FUND 1	FUND 2	FUND 3	FUND 4	FUND 5	FUND 6	TOTAL
Admission Range (From)	Aug-18	Nov-18	Nov-18	May-18	Nov-17	Oct-18	-
Admission Range (To)	Dec-22	Dec-22	May-23	Apr-23	May-23	Dec-22	-
Total number of lines	7,344	992	18,770	16,299	22,992	13,328	79,725
Total number of patients	6,455	846	1,018	707	2,925	11,684	23,635
Total number of clinicians	1,856	81	-	963	414	1,399	4,713^{^^}
NON-PL Costs	\$147,529,732	\$10,789,296	\$24,932,375	**	**	\$174,467,807	-
PL Costs	\$56,218,046	\$8,295,072	\$10,597,797	**	**	\$121,067,500	-
Total Benefit	\$203,747,778	\$19,084,368	\$35,530,172	\$18,550,358	\$75,472,717	\$295,535,307	\$647,920,700
DRG codes	62	22	31	31	4	-	150[^]
Unique MBS items billed	948	24	631	26	215	340	1247[*]
ICD codes	324	106	151	-	-	411	992[^]
Hospital Type - Private	93	36	-	-	-	120	249^{***}
Hospital Type - Public	26	5	-	-	-	45	76^{***}
Number of patients in Private	6211	827	-	-	-	11242	18280
Number of patients in Public	223	15	-	-	-	401	639
Number of patients in both	21	4	-	-	-	41	66

*1247 - Unique MBS items billed across all funds

**Split of PL & NON-PL costs not available

***We did not have the names of the hospitals and therefore it is likely that some hospitals are duplicates. However, this does not affect the ratios of services provided in public versus private hospitals or the types of surgeries performed.

^^We did not have Medicare provider numbers for the clinicians, and it is therefore likely that some clinicians are duplicated because they work in multiple hospitals in the same State.

^ ICDs and DRGs were repeated across all funds as expected. This is the total for all funds not a consolidated list. The consolidated list of 523 unique ICDs codes and 81 unique DRGs is in the appendices.

Despite not being provided with the specialties of the medical practitioners, we were able to accurately determine the specialties included, except for some physicians. This is because Medicare will reject claims made by medical practitioners who do not have permission to bill certain items. For example, if a GP or physician bills a spinal fusion item 51041 the claim will immediately be rejected. Similarly, if a geriatrician or surgeon bills the GP item 23 it will also be rejected. Item 141 can only be claimed by geriatricians, item 65096 only by pathologists and so on.

The Medicare online system is very effective at controlling these types of rules and rejects claims outright if they are made by a medical practitioner who cannot bill them.

However, some items can be claimed by all physicians, most notably items 132 and 133. Therefore, we were unable to be certain which type of physician claimed these services - was it a cardiologist or a neurologist? - but, based on experience, we have suggested the most likely claimants.

Based on the MBS item numbers, we were able to be certain that the following specialties were included in the data: anaesthetists, orthopaedic surgeons, vascular surgeons, neurosurgeons, intensive care specialists, physicians (various), geriatricians, radiologists, pathologists, and GPs.

Fund 1 Findings

The data from fund 1 was the most comprehensive and we received confirmation that it came from one of the four largest PHIs. It comprised 7,344 lines for 6,455 patients and included all MBS items billed by all medical practitioners for each patient across the entire hospital admission. This enabled us to conduct extensive analysis.

1. Item 60506 and anaesthetic time mismatches

We found that 87% of anaesthetic times did not align with the surgical time as indicated by the billing of item 60506 (surgery under 1-hour). Some anaesthetic times were over 10 hours.

Given this was an alarmingly high figure, Synapse ran the query thrice more with different analysts, while Kirontech ran their parallel query. Synapse did not inform Kirontech of their result prior to discussing what Kirontech had found. Both the Synapse and Kirontech analysts all found the same result.

Figure 22 - Fund 1, item 60506 and anaesthetic time mismatches

CATEGORY	COUNT	PERCENTAGE
Total 60506 without 60509	2175	
Billed With anaesthetic (A)	1866	
No anaesthetic billed (B)	309	
Muliple Anes time line (C)	83	
Total Valid 60506 (A-C)	1783	
>23065	1548	86.82%
<=23065	235	13.18%

However, we were mindful of the comments made by one of the anaesthetists we consulted, who provided explanations around why this might happen. So, we ran further queries that assumed a genuinely longer anaesthetic time was required for more patients. The results are shown in figure 23. Even between 2:00 – 3:00 hours the discrepancy was still 50%.

Figure 23 - Fund 1, item 60506 and anaesthetic time mismatches sliding scale

COUNT	NUMBER	CUMULATIVE	PERCENTAGE
16 minutes to 30 minutes	2	2	0.11%
31 minutes to 35 minutes	1	3	0.17%
31 minutes to 45 minutes	5	8	0.45%
46 minutes to 1:00 hour	8	16	0.90%
51 minutes to 55 minutes	1	17	0.95%
56 minutes to 1:00 hour	2	19	1.07%
1:01 hours to 1:05 hours	6	25	1.40%
1:01 hours to 1:15 hours	46	71	3.98%
1:06 hours to 1:10 hours	2	73	4.09%
1:11 hours to 1:15 hours	7	80	4.49%
1:16 hours to 1:20 hours	13	93	5.22%
1:16 hours to 1:30 hours	116	209	11.72%
1:21 hours to 1:25 hours	9	218	12.23%
1:26 hours to 1:30 hours	17	235	13.18%
1:31 hours to 1:35 hours	16	251	14.08%
1:31 hours to 1:45 hours	158	409	22.94%
1:36 hours to 1:40 hours	13	422	23.67%
1:41 hours to 1:45 hours	16	438	24.57%
1:46 hours to 1:50 hours	17	455	25.52%
1:46 hours to 2:00 hours	187	642	36.01%
1:51 hours to 1:55 hours	19	661	37.07%
1:56 hours to 2:00 hours	34	695	38.98%
2:01 hours to 2:10 hours	169	864	48.46%
2:11 hours to 2:20 hours	139	1003	56.25%
2:21 hours to 2:30 hours	109	1112	62.37%
2:31 hours to 2:40 hours	86	1198	67.19%
2:41 hours to 2:50 hours	77	1275	71.51%
2:51 hours to 3:00 hours	86	1361	76.33%

2. Surgery performed and anaesthetic time mismatches

After consulting with a number of surgeons and observing trends in the data for the average time taken to perform certain surgeries, we found a number of outliers where the surgery performed was unlikely to have been possible in the recorded anaesthetic time. This suggests that some of the surgeries claimed may not have been performed. For example, the surgeon may have operated on 1-level of the spine but claimed 3 levels or may have claimed an add-on bone graft (item 51120) that wasn't done.

Figure 24 shows examples of an anaesthetic time of 2:30 hours (item 23111), which we have assumed means the surgery was completed in 2:00 hours. According to the surgeons we consulted, these 3-level decompressions with various grafts and fusions would usually not be completed in such a short time. In addition, a trend in the data was that a 1-level fusion combination of 51011, 51021 and 51041 is often billed with this anaesthetic time. While we acknowledge that some surgeons are faster than others, these examples represent outliers that raise concerns requiring further investigation.

Figure 24 – Fund 1, surgery performed incompatible with anaesthetic time

LOS	AGE	GENDER	CLINICIAN ID	MBS ITEM USED	NON PL ITEMS MEDICAL
3	25	F	de1841fc...	51013	00111, 17610, 20670, 22012, 22025, 23111, 51013, 51023, 51033 , 51303, 58115, 60506, 65090, 65111, 73938
4	71	M	dafaf78c1...	51013	00110, 00591, 06007, 06009, 13870, 13873, 13876, 13876, 17610, 20670, 22012, 22025, 23111, 51013, 51023, 51043, 51120 , 51303, 60509, 65070, 66512, 66569, 73930, 73930
8	70	F	ca74d8d0...	51012	00104, 00105, 00105, 00105, 00105, 00105, 00110, 00116, 00116, 00116, 00116, 00116, 00132, 17610, 20630, 22012, 22025, 23111, 51013, 51022, 51032, 51042, 51120 , 51303, 55848, 55868, 56507, 57712, 57715, 58106, 60509, 65070, 65070, 66512, 66512, 66512, 66512, 66512, 66512, 66512, 73930, 73930, 73930, 73930, 73930, 73930, 73930, 73930, 73930, 73938
8	67	F	ca74d8d0...	51013	00110, 00110, 00116, 00116, 00116, 00116, 00116, 17610, 20630, 22012, 22025, 23111 , 25000, 51013, 51022, 51032, 51042, 51120 , 51303, 58106, 60509, 65070, 65070, 66512, 66512, 66833, 69333, 69333, 73930, 73930, 73938, 73938
7	62	M	48945b15...	51013	13870, 13873, 13876, 13876, 17610, 17615, 20320, 20670, 22012, 22025, 23111 , 23230, 25000, 25025, 51011, 51013, 51023, 51043, 51141 , 51303, 58100, 65070, 65070, 66512, 66512, 66566, 66569, 73930, 73930, 73930, 73930
5	74	M	f1ab8b4a6...	51013	00110, 00110, 00116, 00116, 13870, 13873, 13876, 13876, 17615, 20630, 22012, 22018, 22025, 23111 , 25000, 25015, 51013, 51022, 51032, 51042, 51120 , 51303, 58106, 58503, 60509, 65070, 65070, 65070, 65070, 65123, 66512, 66512, 66512, 66512, 66512, 66512, 66572, 66578, 69333, 69333, 69354, 73930, 73930, 73930, 73938, 73938, 73938, 73938
5	71	M	ca74d8d0c...	51013	00110, 00110, 00116, 00116, 17610, 20630, 22002, 22012, 22025, 23111, 51013, 51022, 51032, 51042, 51120 , 51303, 58106, 60509, 65070, 65096, 66512, 73930, 73930
2	65	M	09dee7c07...	51013	17610, 20670, 22012, 22025, 23111, 51013, 51023, 51043 , 58100, 60509
3	65	M		51013	17610, 17640, 20600, 22012, 22025, 23111, 51013, 51023, 51043 , 51303, 58100, 60509, 65096, 73930

3. Use of advanced spinal surgery item 20670

We found that 68% of the advanced spinal surgery claims were for surgery that was not advanced, representing a clear breach of Medicare requirements.

Figure 25 – Fund 1, anaesthetists billing for advanced surgery that was not advanced

CATEGORY	LINE COUNT	PERCENTAGE
Total Line with 20670	2149	
"Non advanced Surgery (3 or less motion segments) (51011,51021,51041,51021,51022,51042,51013,51023 &51043)"	1469	68.36%

4. Implausible services by physicians

We ran a query for 0–2-day LOS against physician items 132 and 133, as well as a very high paying geriatrician item, which is item 141, and found 79 instances of these items.

Items 132 and 133 can be claimed by all physicians so it was not possible to know what type of physician claimed it. For example, it could have been a neurologist, cardiologist, haematologist, oncologist, rehabilitation physician or other types of physicians. However, in our experience, it is very common for neurologists and rehabilitation physicians to be involved in the care of spinal fusion patients post-operatively. We therefore suggest these claims were likely made by them. These services were almost certainly not provided in accordance with the extensive Medicare requirements.

One of the geriatrician item 141 claims was particularly concerning because it likely also involved theft of a GP referral. This is because item 141 will not be paid unless it has a GP referral in the claim before it is transmitted, and the only GP referral that would usually be on a patient file during a short LOS for elective private surgery would be to the surgeon.

Figure 26 - Fund 1, implausible billing of items 132, 133 and 141 by physicians

0-2 day admssion total lines 2734	
ITEM NUMBER	LINE COUNT
132	45
133	31
141	3
Total	79

5. Concerning use of invasive monitoring by anaesthetists

Over half of all patients in these data had invasive monitoring and seven percent of the invasive monitoring claims were made by one anaesthetist.

Figure 27 - Fund 1, concerning use of invasive monitoring by anaesthetists

ITEM	TOTAL NUMBER OF LINES	PERCENTAGE
22025	56	52.03%
22012	41	
22014	7	
22025 & 22012	3564	
22025 & 22014	128	
22012 & 22014	1	
22025, 22012 & 22014	24	
Total	3821	

The below figure shows a sample of these claims noting the short 1-day LOS for patients having minor decompression surgery.

Figure 28 - Fund 1, detailed invasive monitoring by anaesthetists

014075794fPrac_140	67521c335e	1.00	60509	Fluoroscopy using a mobile image intensifier, in conjunction with a surgical proc
014075794fPrac_140	67521c335e	1.00	22025	Intra-arterial cannulation when performed in association with the management
014075794fPrac_140	67521c335e	1.00	22012	Central venous, pulmonary arterial, systemic arterial or cardiac intracavity blood
014075794fPrac_140	67521c335e	1.00	23091	2:01 HOURS TO 2:10 HOURS
014075794fPrac_140	67521c335e	1.00	51012	Direct spinal decompression or exposure (via a partial or a total laminectomy or
014075794fPrac_140	67521c335e	1.00	20630	INITIATION OF MANAGEMENT OF ANAESTHESIA for procedures in lumbar region,
0140757946f20dac4c5ebca1fa6390		1.00		
01a629fa77Prac_945	e9acfcbb3e	1.00	60509	Fluoroscopy using a mobile image intensifier, in conjunction with a surgical proc
01a629fa77Prac_945	e9acfcbb3e	1.00	51011	Direct spinal decompression or exposure (via a partial or a total laminectomy or
01a629fa77Prac_945	e9acfcbb3e	1.00	23075	1:31 HOURS to 1:45 HOURS
01a629fa77Prac_945	e9acfcbb3e	1.00	22025	Intra-arterial cannulation when performed in association with the management
01a629fa77Prac_945	e9acfcbb3e	1.00	22012	Central venous, pulmonary arterial, systemic arterial or cardiac intracavity blood
01a629fa77Prac_945	e9acfcbb3e	1.00	20670	INITIATION OF MANAGEMENT OF ANAESTHESIA for extensive spine and/or spina
01a629fa77c591955e6cfb3934e0a		1.00		
01c8d20b0:Prac_100	9da793f3c4	1.00	25015	Anaesthesia, perfusion or assistance in the management of anaesthesia, if the p
01c8d20b0:Prac_100	9da793f3c4	1.00	22025	Intra-arterial cannulation when performed in association with the management
01c8d20b0:Prac_100	9da793f3c4	1.00	22012	Central venous, pulmonary arterial, systemic arterial or cardiac intracavity blood
01c8d20b0:Prac_100	9da793f3c4	1.00	20670	INITIATION OF MANAGEMENT OF ANAESTHESIA for extensive spine and/or spina
01c8d20b0:Prac_100	9da793f3c4	1.00	51013	Direct spinal decompression or exposure (via a partial or a total laminectomy or
01c8d20b0:Prac_100	9da793f3c4	1.00	60506	Fluoroscopy using a mobile image intensifier, in conjunction with a surgical proc
01c8d20b0:Prac_100	9da793f3c4	1.00	23091	2:01 HOURS TO 2:10 HOURS
01c8d20b0a254c0aa106f5e5e5ef6f		1.00		
0216551dc:Prac_11	c934d76fbd	1.00	60509	Fluoroscopy using a mobile image intensifier, in conjunction with a surgical proc
0216551dc:Prac_11	c934d76fbd	1.00	20600	INITIATION OF MANAGEMENT OF ANAESTHESIA for procedures on cervical spine
0216551dc:Prac_11	c934d76fbd	1.00	22012	Central venous, pulmonary arterial, systemic arterial or cardiac intracavity blood
0216551dc:Prac_11	c934d76fbd	1.00	22025	Intra-arterial cannulation when performed in association with the management
0216551dc:Prac_11	c934d76fbd	1.00	23113	2:41 HOURS TO 2:50 HOURS
0216551dc:Prac_11	c934d76fbd	1.00	51011	Direct spinal decompression or exposure (via a partial or a total laminectomy or

6. Concerning use of long, complex pre-anaesthetic consultations by anaesthetists

It was common to see the same anaesthetists upcoding as a pattern of behaviour. For example, we found that 27.6% of anaesthetists in the fund 1 data billed a longer pre-anaesthetic consultation than was likely provided, and these were often the same anaesthetists who always added the most modifiers and billed the longest anaesthetic times.

Figure 29 - Fund 1, long pre-anaesthetic consultations

ITEM	TOTAL NUMBER OF LINES	PERCENTAGE
17615	1691	27.60%
17620	248	
17625	88	
Total	2027	

Figure 30 shows examples of these claims where the patients are all aged between 20 and 30, had relatively minor surgery and a short LOS, so are unlikely to have been complex requiring anything beyond the standard short pre-anaesthetic consultation item 17610.

Figure 30 - Fund 1, young patients having long pre-anaesthetic consultations

PATIENT ID	AGE	GENDER	LOS	ITEM 1	ITEM 2	ITEM 3	ITEM 4	ITEM 5	ITEM 6	ITEM 7	ITEM 8	ITEM 9	ITEM 10	ITEM 11
e72d592a9f3...	25	M	2	13870	13876	17615	20670	22012	22025	23114	51011	51021	51041	51120
7d6f25f610ef5...	25	M	2	17615	18276	20630	22012	22025	23075	25000	25025	51012	51303	60506
03be6c761fb9...	29	M	2	17615	20630	23115	25020	51011	51011	60506	60506	65070	66512	
c8fa7d214ced...	27	F	1	17615	20630	22012	22025	23113	25000	51011	51303	60509		
9994ccb0b56...	21	F	1	6011	6011	17615	20670	23115	25000	51011	60509			
b43a77fc62a9...	23	F	1	17615	20630	22012	22025	23065	51011	51303	60509			
95e8116e21217...	27	F	1	17615	18276	20630	23116	25000	51011	51303				
bb71eff044009...	30	F	1	6009	17615	20630	23052	51011	51303	60509				
3eb2f0d05a40c...	29	M	2	6009	17615	20630	23065	51011	51303	60509				
80c08bdbd4a2...	29	F	2	6009	17615	20630	23072	51011	51303	60509				
7c24393ec5e17...	30	M	2	17615	20630	23085	51012	51303	60506					
c3f461ef6eb2cb...	29	F	2	110	17615	20630	23075	51011	60506					
55c5a71c491f1b...	30	M	2	17615	20630	23091	51303	60509						
a8d767236c84c...	30	M	1	17625	20670	22012	22025	22031	23045	25000	51011	51303	60509	

7. Discharging patients directly from intensive care

The MBS has a bizarre rule whereby 2-days of ICU care can be lawfully billed in a 24-hour period. So, for example, an ICU specialist can bill the MBS day 1 item (13870) at 10:00pm and the day 2 MBS item (13873) at 6:00am the next morning. We found 39 patients who had been admitted to ICU after surgery requiring only a 1-night stay and 37 were billed the sequential combination of 13870 then 13873 indicating they were discharged home directly from their ICU bed the day after surgery. The likelihood that any of these ICU admissions met Medicare requirements is extremely low as is the likelihood they genuinely needed ICU care at all.

Figure 31 - Fund 1, discharging patients direct from ICU

AGE	GENDER	CLINICIAN ID	MBS ITEM	LOS	# MBS ITEMS									
65	F	dd59aa45...	51012	1	45	60	11700	13870	13873	13876	13876	13882		
67	F	0d66bca6...	51011	1	32	13870	13873	13876	13876	17615	20600	22012		
54	M	60898c3c...	51011	1	30	110	13870	13873	13876	13876	17610	20600		
61	M	60898c3c...	51011	1	30	13870	13873	13876	13876	17610	20600	22012		
72	M	e8410c51...	51012	1	30	13870	13873	13876	13876	17615	20670	22001		
38	M	48f37b11...	51011	1	30	13870	13873	13876	17610	20620	22012	22025		
67	F	bd329dba...	51013	1	28	13870	13873	13876	13876	17610	20600	22012		
84	M	bd329dba...	51011	1	25	13870	13873	13876	13876	17610	20630	22012		
65	F	b98a97c30...	51011	1	25	6011	13870	13873	13876	13876	17615	20630		
65	F	6607423c3...	51011	1	25	13870	13873	13876	13876	17615	20604	22012		
79	M	dc25c6678...	51012	1	25	13870	13873	13876	13876	17610	20630	22012		
49	F	535ade42c...	51011	1	24	13870	13873	13876	13876	17610	20600	22012		
63	M	a19f7e229d...	51011	1	24	13870	13873	13876	13876	17615	20630	22014		
56	F	842914574...	51011	1	22	13870	13873	13876	13876	17610	20500	22012		
67	M	0bbb62edf6...	51011	1	22	11700	13870	13873	13876	13876	17610	20630		
60	F	880268467...	51011	1	22	13870	13873	13876	13876	17610	20600	22014		
77	M	a19f7e229d...	51011	1	21	110	13870	13873	17610	20630	23075	25000		
62	M	bbce4fb37...	51011	1	21	6009	6009	13870	13873	17615	20670	22012		
61	M	60898c3cfd...	51011	1	21	13870	13873	13876	13876	17610	20600	22012		
61	F	e78ee0ea1...	51063	1	21	11705	13870	13873	13876	13876	51011	51021		
88	M	842914574...	51012	1	21	13870	13873	13876	13876	17610	20630	22014		
58	F	49dcdcb7d...	51011	1	21	13870	13873	13876	13876	17610	20600	22014		
40	M	48f37b11b0...	51012	1	20	13870	13873	13876	17610	20670	22012	22025		
77	F	60898c3cfd...	51011	1	20	13870	13873	13876	13876	17615	20600	22014		
64	F	a19f7e229d...	51011	1	19	13870	13873	13876	13876	17615	20600	22014		
46	M	64a5452dac...	51012	1	19	13870	13873	13876	13876	17610	20670	22012		
76	M	a19f7e229d...	51012	1	18	13870	13873	13876	13876	17610	20670	22012		
60	M	bd329dba...	51011	1	18	13870	13873	17610	20600	23085	51011	51021		
61	M	4a6acdff59...	51013	1	18	13870	13873	13876	13876	51013	51023	51043		
82	F	341359afe...	51011	1	16	13870	13873	13876	17610	20630	22012	22025		
81	M	ca702b9e1...	51011	1	16	13870	13873	17610	20630	23065	25000	25014		
59	M	bd329dba5f...	51011	1	15	13870	13873	17610	20630	23045	51011	51303		
69	F	535ade42c7...	51011	1	15	13870	13873	13876	13876	51011	51021	51041		
49	F	bd329dba5f...	51011	1	14	13870	13873	13876	13876	17610	20600	22012		
79	M	a19f7e229d...	51011	1	12	13870	13873	17610	20830	23085	25015	51011		
69	M	a19f7e229d...	51012	1	11	13870	13873	17610	20630	23065	25000	51012		
66	F	UNKNOWN	51011	1	10	13870	13873	17615	20630	23075	51011	60506		

8. Spinal fusion for low back pain

Medicare does not permit the claiming of spinal fusion surgery for chronic low back pain without a diagnosis. We found 357 (5.53%) instances where spinal fusions had been performed when the patient’s PDX was low back pain. This finding demonstrates just how ineffective Medicare rules are. Without seeing the ICD code and therefore knowing why the patient is having surgery, Medicare pays blindly, trusting that medical practitioners will do the right thing.

In other countries where Synapse undertakes medical billing work, the ICD code is transmitted with the claim, enabling claims to be immediately rejected when impermissible code combinations hit the system. For example, if the same rule were in place in a country using an ICD based billing system (there are over 60), any claim submitted with any of the low back pain ICD codes together with a spinal fusion code would immediately be rejected.

The cost to Medicare and the PHIs was almost \$20 million.

Figure 32 - Fund 1, spinal fusions for low back pain

ICD CODES	MBS ITEM (FUSION)	FUND 1		
		NUMBER PTS BILLED (ICD & FUSION)	TOTAL NUMBER OF PATIENT IN THE DATA SET	% (ICD & FUSION)
M511	51022	357	6455	5.53%
M513	51023			
M543	51025			
M544	51026			
M545	51041			
M5486	51042			
M5487	51043			
M5488	51044			
M5495	51045			
M5496	51061			
M5497	51062			
M5499	51063			
	51064			
	51065			
PL cost				\$8,422,372.00
Non- PL cost				\$ 11,453,228.77
Total Benefit				\$19,875,600.77

9. Repeat spinal surgery

The number of patients having repeat spinal surgery was 737 (11.42%) out of which 622 patients (84%) had surgery that *did not* involve revision of a previous spinal fusion. The average number of days between surgery was 315.

Fund 2 Findings

The fund 2 data was the smallest of the 6 datasets. It had 992 lines for 846 patients and was limited to the spinal surgery MBS items only. There were no MBS items included for other medical practitioners, but it did include ICU admission dates. For these reasons, we had to limit our analysis to the following queries:

1. Questionable post-operative admissions to ICU for relatively minor surgery.
2. Spinal fusion for low back pain.
3. Repeat spinal surgery

1. Questionable post op admissions to ICU

All the below patients had relatively minor surgery and the likelihood they genuinely needed an ICU admission for intensive monitoring is low.

Figure 33 - Fund 2, questionable post-op admissions to ICU

PATIENT ID	LOS	AGE	GENDER	MBS ITEMS USED
34522977	3	85	M	M-51021; M-51031;
172952864	2	61	F	M-51022; M-51012; M-51042;
1869679479	3	67	M	M-51031; M-51021;
1871146825	3	48	M	M-51011; M-51011;
1871353373	2	64	M	M-51012;
1872272598	3	35	F	M-51041; M-51021;
1872798645	3	80	M	M-51011;

2. Spinal fusion for low back pain

Out of the total 849 patients, we found that 77 (9.07%) had undergone spinal fusion surgery with a principal diagnosis of low back pain at a cost of \$2.7 million.

Figure 34 - Fund 2, spinal fusions for low back pain

ICD CODES	MBS ITEM (FUSION)	FUND 1		
		NUMBER PTS BILLED (ICD & FUSION)	TOTAL NUMBER OF PATIENT IN THE DATA SET	% (ICD & FUSION)
M511	51022	77	849	9.07%
M513	51023			
M543	51025			
M544	51026			
M545	51041			
M5486	51042			
M5487	51043			
M5488	51044			
M5495	51045			
M5496	51061			
M5497	51062			
M5499	51063			
	51064			
	51065			
PL cost				
Non- PL cost				\$ 1,136,678.48
Total Benefit				\$2,726,252.48

3. Repeat spinal surgery

The number of patients having repeat spinal surgery in the fund 2 data was the highest at 14.42% (122) and none of these surgeries involved revision of previous spinal fusions. The average number of days between surgery was 356.

Fund 3 Findings

The fund 3 data comprised 18,770 lines for 1018 patients. This data also enabled extensive analysis because we had all claim data for all medical practitioners, but we also had a unique identifier for each of them. This allowed us to know exactly how many medical practitioners provided care to each patient and who billed what.

1. Item 60506 and anaesthetic time mismatches

The rate of mismatches between item 60506 and the billed anaesthetic time was over 90%. We did not run the same sliding scale analysis with this fund but would expect the same result.

Figure 35 - Fund 3, item 60506 incompatible with anaesthetic time

CATEGORY	COUNT OF PATIENTS	PERCENTAGE
Total 60506 without 60509	411	
Billed with anaesthetic (A)	397	
No anaesthetic billed (B)	14	
>23065	358	90.18%
<=23065	39	9.82%

Below are examples of our findings, where the anaesthetic times are 6-8 hours but the fluroscopy billed meant the surgery took less than 1-hour.

Figure 36 - Fund 3, details of item 60506 and anaesthetic time mismatches

PATIENT ID	LOS	AGE	GENDER	MBS ITEMS	
283917	22	61	F	23450 - 8:41 hours to 8:50 hours	M-58503, M-60506
199233	12	61	M	23420 - 8:11 hours to 8:20 hours	M-58503, M-60506
63506	14	61	M	23390 - 7:41 hours to 7:50 hours	M-60506
1767	7	68	F	23300 - 6:11 hours to 6:20 hours	M-60506, M-58503
37669	5	69	M	23290 - 6:01 hours to 6:10 hours	M-60506
105218	4	64	M	23300 - 6:11 hours to 6:20 hours	M-60506
1502	8	67	M	23450 - 8:41 hours to 8:50 hours	M-58503, M-60506
6852	11	76	F	23290 - 6:01 hours to 6:10 hours	M-60506
248323	11	73	F	23330 - 6:41 hours to 6:50 hours	M-60506
106899	5	66	M	23390 - 7:41 hours to 7:50 hours	M-60506, M-58106
12766	11	84	F	23300 - 6:11 hours to 6:20 hours	M-60506

2. Surgery performed and anaesthetic time mismatches

Example 1

The below patient is a 39 y.o female, who had two spinal surgeries one month apart. The first was a minor decompression in February 2022 and the second, another decompression but this time with a fusion, in March 2022. Both surgeries were performed by the same surgeon with the same anaesthetist. The radiologist who billed the fluoroscopies was different each time. Both radiologists billed item 60509 indicating each surgery took 1-hour or more. However, the surgical and anaesthetic billings raise immediate concerns.

The first operation had an anaesthetic time of 1:46 HOURS to 2:00 HOURS (item 23085), but the patient only underwent a single level decompression (item 51011). The second operation had a shorter anaesthetic time of 1:16 HOURS to 1:30 HOURS (item 23065) but the surgery performed was much more extensive, involving a single level decompression, a fixation of a single motion segment with vertebral body screw, pedicle screw or hook instrumentation, a posterior and/or posterolateral bone graft to one motion segment and a bone graft, harvesting of autogenous graft, via separate incision or via subcutaneous approach.

Allowing for the anaesthetic to be 30 minutes longer than the surgical time, this means that the same surgeon took 1:30 hours to decompress 1-level, but around an hour to do much more – decompress, graft and fuse 1-level. According to our surgeons and trends in the data, this is implausible.

It should also be noted that there is no incentive for the anaesthetist to down-code the anaesthetic time, only to up-code it, so the shorter anaesthetic time for the second surgery is likely the truth.

Figure 37 - Fund 3, surgery performed and anaesthetic time mismatches

PATIENT ID	LOS	AGE	GENDER	MBS ITEMS NUMBERS USED
321158	2	39	F	51011
321158	2	39	F	110
321158	2	39	F	17615, 20630, 23085, 25000, 22012, 22025
321158	2	39	F	51303
321158	2	39	F	60509
321158	2	39	F	65070, 66512, 73930
321158	2	39	F	116
321158	3	39	F	00591, 20630, 23065, 22012, 22025, 25025
321158	3	39	F	63491, 63182
321158	3	39	F	60509
321158	3	39	F	51011, 51021, 51031, 51120
321158	3	39	F	M-51303
321158	3	39	F	M-00110, M-00110

Example 2

The patient in figure 38 had a direct spinal decompression or exposure (via a partial or a total laminectomy or a partial vertebrectomy), or a posterior spinal release of one motion segment, fixation of one motion segment with vertebral body screw, pedicle screw or hook instrumentation including sublaminar tapes or wires, and a spinal fusion, in about 20 minutes.

Item 23041 is an anaesthetic time of 46-50 minutes, and the item 60506 also confirms this period. So, it appears that both the anaesthetist and radiologist have recorded their services truthfully, neither having any incentive to down-code. However, if we allow the same 30 minutes extra for the anaesthetic, this surgery was performed in 20 minutes. Even if we reduce the extra anaesthetic time to 15 mins, it still means this surgery was performed in 35 minutes which is very fast.

Figure 38 – Fund 3, a very fast spinal fusion surgery

PATIENT	PATIENT ID	LOS	AGE	GENDER	MBS ITEMS NUMBERS USED
1	111476	5	70	F	60506
	111476	5	70	F	51303
	111476	5	70	F	65090, 65111, 65120, 73930
	111476	5	70	F	06011, 51011, 51021, 51041
	111476	5	70	F	17610, 20600, 23041 , 25000, 22012, 22025
	111476	5	70	F	58503, 58100

Example 3

The patients in figure 39 had 3-4 level fusions and decompressions and bone grafts in very short operative times and were therefore identified by us as outliers. The last patient had: Direct spinal decompression or exposure (via a partial or a total laminectomy or a partial vertebrectomy), or a posterior spinal release, 3 motion segments, Fixation of motion segment with vertebral body screw, pedicle screw or hook instrumentation including sublaminar tapes or wires, 2 motion segments, Spine, posterior and/or posterolateral bone graft to, 2 motion segments, Spinal fusion, anterior column (anterior, direct lateral or posterior interbody), 2 motion segments, and Bone graft, harvesting of autogenous graft, via separate incision or via subcutaneous approach, in conjunction with spinal fusion, in approximately 1:30 hours. According to the surgeons we consulted this is very fast.

Figure 39 – Fund 3, further examples of surgical and anaesthetic time mismatches

PATIENT ID	LOS	AGE	GENDER	MBS ITEMS NUMBERS USED
11535	8	60	F	M-65096, M-65120, M-65070, M-60509, M-17615, M-20600, M-23111 , M-25000, M-25020, M-22012, M-22025, M-51013, M-51023, M-51033 , M-06007, M-66500, M-66500, M-66500, M-65070, M-66500, M-66500, M-73931, M-66500, M-63182, M-66500, M-66500, M-66500, M-65070, M-66500, M-66500, M-66500
260518	8	64	F	M-65096, M-65126, M-66512, M-73931, M-63185, M-56233, M-66566, M-73931, M-60506, M-51013, M-51023, M-51033 , M-51303, M-17610, M-20670, M-23101 , M-25020, M-22002, M-22012, M-22025, M-58112, M-65070, M-66512, M-00110, M-66833, M-73931
340161	9	78	F	M-17610, M-20630, M-23101 , M-25014, M-22012, M-22025, M-51013, M-51022, M-51032, M-51042, M-51120 , M-51303, M-60509, M-00132, M-00116, M-00116, M-00116, M-58106, M-00110, M-55038, M-00110, M-00116, M-00116, M-00047
157163	5	71	F	M-51013, M-51022, M-51032, M-51042, M-51120 , M-17610, M-20630, M-23101 , M-22012, M-22025, M-60509, M-51303, M-00110, M-65070, M-66512, M-73930, M-58106, M-00116, M-00110, M-65070, M-66512, M-73930, M-00116
240776	6	57	M	M-65096, M-73930, M-51014, M-51022, M-51032, M-51042, M-51120 , M-17610, M-20630, M-23111 , M-22012, M-22025, M-60509, M-65070, M-66512, M-73930, M-00132, M-00116, M-58106, M-00116, M-00116, M-00110, M-00116
157162	4	74	M	M-51013, M-51022, M-51032, M-51042, M-51120 , M-17610, M-20630, M-23091 , M-22012, M-22025, M-60509, M-51303, M-65070, M-66512, M-73930, M-00110, M-00116, M-58106, M-00116

3. Use of long pre-anaesthetic consultations

We again found a very high level (43%) of anaesthetists billing the long pre-anaesthetic consultation items, often for young patients having minor surgery with a short LOS.

Figure 40 – Fund 3, anaesthetists claiming long pre-anaesthetic consultations

ITEM	TOTAL NUMBER OF PATIENTS	PERCENTAGE
17615	366	42.93%
17620	41	
17625	30	
Total	437	

Below are examples of this phenomenon. One 27 y.o male had three admissions in three months for the same minor decompression surgery where his LOS's were 1 and 2 nights. The anaesthetist for his first surgery (anaesthetist 1) billed as we would expect – a short, standard pre-anaesthetic consultation item 17610. However, this patient had a different anaesthetist for his second two surgeries (anaesthetist 2) and this anaesthetist billed the long, complex pre-anaesthetic consultation each time - item 17615. So, the same young patient, having the same minor surgery is standard for one anaesthetist but complex for another. Further, there is little explanation for anaesthetist 2 billing a long consultation for surgery number three given the anaesthetist already knew the patient from the prior operation.

Figure 41 – Fund 3, examples of long pre-anaesthetic consultations

PATIENT ID	LOS	AGE	GENDER	MBS ITEMS NUMBERS USED
101429	1	27	M	M-60506
101429	1	27	M	M-06009, M-51011
101429	1	27	M	M-17610 , M-20630, M-23071 - Anaesthetist 1, standard consult
101429	1	27	M	M-00110
101429	1	27	M	M-51303
101429	1	27	M	M-00116
101429	2	27	M	M-00110
101429	2	27	M	M-60506
101429	2	27	M	M-17615 , M-20630, M-23073 - Anaesthetist 2, long complex consult
101429	2	27	M	M-06009, M-51011
101429	2	27	M	M-51303
101429	2	27	M	M-00116
101429	2	27	M	M-51303
101429	2	27	M	M-73930, M-66512, M-65126, M-65070
101429	2	27	M	M-00116
101429	2	27	M	M-60506
101429	2	27	M	M-17615 , M-20630, M-23081 - Anaesthetist 2, long complex consult
101429	2	27	M	M-06009, M-51011
101429	2	27	M	M-00116
101429	2	27	M	M-00116
100993	1	23	F	M-51011, M-51021, M-51041
100993	1	23	F	M-51303
100993	1	23	F	M-60509
100993	1	23	F	M-17615 , M-20600, M-23112, M-22012, M-22025
100993	1	23	F	M-51011, M-51021, M-51041
100993	1	23	F	M-51303
100993	1	23	F	M-60509
284918	2	36	F	M-51011
284918	2	36	F	M-51303
284918	2	36	F	M-60506
284918	2	36	F	M-17615 , M-20630, M-23075, M-22012, M-22025
246290	2	38	M	M-51011, M-51021, M-51041, M-51120
246290	2	38	M	M-58100, M-60509
246290	2	38	M	M-51303
246290	2	38	M	M-17615 , M-20600, M-23111, M-22012, M-22025
246290	2	38	M	M-58100
248107	2	34	F	M-60509
248107	2	34	F	M-51303
248107	2	34	F	M-17615 , M-20630, M-23101, M-25020, M-22012, M-22025
248107	2	34	F	M-51011

4. Use of advanced spinal surgery item 20670

We found that 82% of claims made by anaesthetists for MBS item 20670 did not meet the requirement for advanced spinal surgery and therefore breached the Medicare rule.

Figure 42 – Fund 3, anaesthetists billing advanced surgery that was not advanced

CATEGORY	PATIENT COUNT	PERCENTAGE
Total patients with 20670	453	
Non advanced Surgery (3 or less motion segments)(51011, 51021, 51041, 51021, 51022, 51042, 51013, 51023 & 51043)	373	82.34%

5. Implausible billing by physicians

We ran the same analysis as for fund 1 to analyse physicians billing items 132 and 133, and geriatricians billing item 141 for patients who had a 0–2–day LOS. We found 19 instances in this data. These services were almost certainly not provided in accordance with Medicare rules and have been upcoded to these very high paying services.

Figure 43 – Fund 3, implausible billing by physicians

0-2 day LOS total number of patients 242	
ITEM NUMBER	LINE COUNT
132	10
133	8
141	1
Total	19

6. Concerning use of invasive monitoring by anaesthetists

The incidence of invasive monitoring was again very high at over 80%.

Figure 44 – Fund 3, concerning use of invasive monitoring by anaesthetists

ITEM	TOTAL NUMBER OF PATIENTS	PERCENTAGE
22025	7	82.12%
22012	7	
22014	1	
22025 & 22012	807	
22025 & 22014	9	
22012 & 22014	1	
22025, 22012 & 22014	4	
Total	836	

The below examples show patients in their 20's and 30's who had relatively minor surgery. The 19 y.o female had a single level decompression, and the fluoroscopy was less than 1-hour. Yet the anaesthetist has billed an incompatible anaesthetic time of 2:11 hours to 2:20 hours (item 23101) and billed invasive monitoring.

Figure 45 - Fund 3, examples of invasive monitoring

PATIENT ID	LOS	AGE	GENDER	MBS ITEMS NUMBERS USED
66510	2	19	F	M-51303
66510	2	19	F	M-60506
66510	2	19	F	M-17610, M-20630, M-23101, M-22012, M-22025
66510	2	19	F	M-51011
268670	1	29	F	M-11707, M-65096, M-65126, M-66512, M-73931
268670	1	29	F	M-11705, M-11705
268670	1	29	F	M-51011
268670	1	29	F	M-51303
268670	1	29	F	M-17610, M-20630, M-23075, M-25000, M-22012, M-22025
268670	1	29	F	M-60509
268670	1	29	F	M-65070
100993	1	23	F	M-51011, M-51021, M-51041
100993	1	23	F	M-51303
100993	1	23	F	M-60509
100993	1	23	F	M-17615, M-20600, M-23112, M-22012, M-22025
100993	1	23	F	M-51011, M-51021, M-51041
100993	1	23	F	M-51303
100993	1	23	F	M-60509
299955	2	30	M	M-11705
299955	2	30	M	M-65096, M-65126, M-66512, M-73931
299955	2	30	M	M-51160
299955	2	30	M	M-51021, M-51041
299955	2	30	M	M-17610, M-20630, M-23116, M-22012, M-22025
299955	2	30	M	M-51303, M-51303
299955	2	30	M	M-65070
299955	2	30	M	M-56223
248107	2	34	F	M-60509
248107	2	34	F	M-51303
248107	2	34	F	M-17615, M-20630, M-23101, M-25020, M-22012, M-22025
248107	2	34	F	M-51011
240785	1	35	F	M-51011, M-18276, M-06007
240785	1	35	F	M-63176
240785	1	35	F	M-17610, M-20630, M-23114, M-25000, M-25020, M-22012, M-22025
240785	1	35	F	M-66512, M-73931, M-65123, M-66512, M-73931, M-65096

7. Discharging patients directly from intensive care

We found 2 patients out of 98 who had a 1-day LOS and were discharged directly from their ICU bed the day after their surgery.

Figure 46 - Fund 3, patients discharged directly from ICU

PATIENT ID	LOS	AGE	GENDER	MBS ITEMS NUMBERS USED
187026	1	75	M	
187026	1	75	M	M-65070, M-65126, M-66512, M-66518, M-73930
187026	1	75	M	M-13870
187026	1	75	M	M-17610, M-20670, M-23101, M-25000, M-22025, M-22012
187026	1	75	M	M-51303
187026	1	75	M	M-66569, M-73938
187026	1	75	M	M-58503, M-60509
187026	1	75	M	M-51011, M-51021, M-51041
187026	1	75	M	M-11705
187026	1	75	M	M-65070, M-65129, M-66512, M-66566, M-73938
187026	1	75	M	M-13873
187026	1	75	M	M-17640
187026	1	75	M	M-11705

PATIENT ID	LOS	AGE	GENDER	MBS ITEMS NUMBERS USED
325413	1	58	M	
325413	1	58	M	M-13870, M-13876
325413	1	58	M	M-51303
325413	1	58	M	M-51011, M-51021, M-51041, M-51131
325413	1	58	M	M-17615, M-20670, M-23091, M-22025, M-22014

8. Spinal fusion for low back pain

Out of 1018 patients, we found 60 (5.89%) who had undergone spinal fusion surgery for low back pain at a cost of \$413,136.

Figure 47 - Fund 3, spinal fusion for low back pain

ICD CODES	MBS ITEM (FUSION)	FUND 1		
		NUMBER PTS BILLED (ICD & FUSION)	TOTAL NUMBER OF PATIENT IN THE DATA SET	% (ICD & FUSION)
M511	51022	60	1018	5.89%
M513	51023			
M543	51025			
M544	51026			
M545	51041			
M5486	51042			
M5487	51043			
M5488	51044			
M5495	51045			
M5496	51061			
M5497	51062			
M5499	51063			
	51064			
	51065			
PL cost				\$ -
Non- PL cost				\$ 413,136.76
Total Benefit				\$ 413,136.76

9. Repeat spinal surgery

The number of patients having repeat spinal surgery was 116 (11.39%) out of which 78 patients (67%) had surgery that *did not* involve revision of a previous spinal fusion. The average number of days between surgery was 349.

Fund 4 Findings

Fund 4 had 16,299 lines for 707 patients, but the data was organised differently to the other files. This meant we were unable to run all queries. Specifically, we were unable to analyse spinal fusions for low back pain because the data included a number of ICD codes for each patient, and we did not have clarity around which was the PDX. However, we were able to analyse most other areas that we had analysed for the other funds.

1. Item 60506 and anaesthetic time mismatches

The rate of mismatches between item 60506 and the billed anaesthetic time was 79%.

Figure 48 - Fund 4, item 60506 and anaesthetic time mismatches

CATEGORY	PATIENT COUNT/DOS	PERCENTAGE
Total 60506 without 60509	148	
Billed With anaesthetic (A)	145	
No anaesthetic billed (B)	3	
Multiple Anes time line (C)	2	
Total Valid 60506 (A-C)	143	
>23065	113	79.02%
<=23065	30	20.98%

2. Use of long pre-anaesthetic consultations

The incidence of long pre-anaesthetic consultations in this data was 19%. We again noted that often, these patients were young, had minor surgery and a short LOS.

Figure 49 - Fund 4, use of long pre-anaesthetic consultations

ITEM	TOTAL NUMBER OF PATIENTS	PERCENTAGE
17615	121	19%
17620	12	
Total	133	

The below examples show young patients aged between 35 and 47 who are unlikely to have required a longer, more complex pre-anaesthetic consultation beyond the standard item 17610.

Figure 50 – Fund 4, examples of long pre-anaesthetic consultations

PATIENT ID	LOS	AGE	GENDER	MBS ITEM NUMBER
160001	1	35	F	DRGPR,I09B, ADD27, DE608, DE657, MN172, ,51022, 51032, 65096, 65123, 66512, 73930, 110, 17615 ,21170,23065, 60509
192082	1	35	F	58100, 60509, 11705, 65070, 65093, 65111, 65129, 66512, 66569, 73930, AS2, B06, B09, BP008, LH414, MN172, SYN09, TX006, TX008, 6011, 51011, 51041,110,116, 51303, 17615 , 20600, 22012, 22025, 23119
239551	1	36	F	51011, 17615 , 20630,22012, 22025, 23055,110B,JJ003,51303
197293	2	47	F	13870, 13873, I09B, DU011, DU012, DU039, FY001, G0290, MN229, 51131, 51012, 51021, 51041, 56220, 60509, 17615 , 20600, 23111

3. Use of advanced spinal surgery item 20670

The use of the advanced surgery item when surgery was not advanced remained consistently high at 79% in this cohort.

Figure 51 – Fund 4, advanced spinal surgery item for surgery that was not advanced

CATEGORY	PATIENT COUNT	PERCENTAGE
Total patients with 20670	242	
Non advanced Surgery (3 or less motion segments)(51011, 51021, 51041, 51021, 51022, 51042, 51013, 51023 & 51043)	193	79.75%

4. Questionable billing by physicians

While there were no instances of geriatrician item 141 in the 0-2-day cohort of this data, we did find 11 item 132 and 133 claims made by physicians that almost certainly did not meet Medicare requirements.

Figure 52 – Fund 4, questionable billing by physicians

0-2 day LOS total number of patients 168	
ITEM NUMBER	LINE COUNT
132	10
133	1
Total	11

5. Concerning use of invasive monitoring by anaesthetists

Over half of all patients in this dataset had potentially unnecessary invasive monitoring.

Figure 53 - Fund 4, invasive monitoring by anaesthetists

ITEM	TOTAL NUMBER OF PATIENTS	PERCENTAGE
22025	6	52.33%
22012	6	
22014	4	
22025 & 22012	350	
22025 & 22014	1	
22025, 22012 & 22014	3	
Total	370	

Below are examples of this phenomenon showing mostly young patients having minor surgery and a short LOS, whose anaesthetists billed invasive monitoring.

Figure 54 - Fund 4, examples of invasive monitoring

PATIENT ID	LOS	AGE	GENDER	MBS ITEMS NUMBERS USED
64958	1	62	F	51303, 51011, 17610, 20670, 22014, 22025 , 23111
155810	2	34	M	65070, 66512, 73930, 13870, 13873, 13876, 51303, 51012, 51022, 51042, 60506, 17610, 20600, 22012, 22025 , 23116
190053	1	43	M	60506, 17610, 20630, 22012, 22025, 23075, 51303, 51011
192082	1	35	F	58100, 60509, 11705, 65070, 65093, 65111, 65129, 66512, 66569, 73930, 6011, 51011, 51041, 110, 116, 51303, 17615, 20600, 22012, 22025 , 23119
239551	1	36	F	51011, 17615, 20630, 22012, 22025 , 23055, 110B, JJ003, 51303

6. Discharge direct from ICU

We found one patient who had an overnight admission and was discharged directly from her ICU bed the next morning after her treating clinicians had generated substantial additional and likely wasteful costs to Medicare and her PHI.

Figure 55 - Fund 4, discharges direct from ICU

PATIENT ID	LOS	AGE	GENDER	PROVIDER IDENTIFIER	MBS ITEM	ITEM NUMBER
186515	1	57	F	8218982	51011	B03B
186515	1	57	F	8218982	51011	JJ636
186515	1	57	F	8218982	51011	LH490
186515	1	57	F	10917936	51011	65070
186515	1	57	F	10917936	51011	66512
186515	1	57	F	10917936	51011	66566
186515	1	57	F	10917936	51011	73938
186515	1	57	F	8643383	51011	58100
186515	1	57	F	8643383	51011	60509
186515	1	57	F	10363974	51011	17610
186515	1	57	F	10363974	51011	20600
186515	1	57	F	10363974	51011	22012
186515	1	57	F	10363974	51011	22025
186515	1	57	F	10363974	51011	23113
186515	1	57	F	7639989	51011	13870
186515	1	57	F	7639989	51011	13873
186515	1	57	F	7639989	51011	13876
186515	1	57	F	9973526	51011	51131
186515	1	57	F	9973526	51011	60509
186515	1	57	F	9973526	51011	51011
186515	1	57	F	10707416	51011	110
186515	1	57	F	11020992	51011	51303

7. Repeat spinal surgery

The number of patients having repeat spinal surgery was 70 (9.9%) out of which 59 patients (84%) had surgery that *did not* involve revision of a previous spinal fusion. The average number of days between surgery was 322.

Fund 5 Findings

Fund 5 had 22,992 lines for 2,925 patients. However, the data was difficult to work with because of formatting challenges and was limited to the surgical MBS items only and a smattering of anaesthetic codes, though full anaesthetic claims were missing. We were therefore only able to run one query which was repeat surgeries.

Repeat spinal surgery

The number of patients having repeat spinal surgery was 329 (11.25%) out of which 275 patients (83%) had surgery that *did not* involve revision of a previous spinal fusion. Some patients had five surgeries and the average number of days between surgeries was 393.

Fund 6 Findings

Fund 6 had 13,328 lines for 11,684 patients, but like fund 5, the data was very difficult to work with. We therefore ran two queries only which were the number of patients who had spinal fusion for low back pain and repeat spinal surgeries.

Spinal fusion for low back pain

We found 882 patients out of the total 11,684 (7.55%) who had undergone spinal fusions for low back pain at a cost of over \$38 million.

Figure 56 - Fund 6, spinal fusion for low back pain

ICD CODES	MBS ITEM (FUSION)	FUND 1					
		NUMBER PTS BILLED (ICD & FUSION)	TOTAL NUMBER OF PATIENT IN THE DATA SET	% (ICD & FUSION)			
M511	51022	882	11684	7.55%			
M513	51023						
M543	51025						
M544	51026						
M545	51041						
M5486	51042						
M5487	51043						
M5488	51044						
M5495	51045						
M5496	51061						
M5497	51062						
M5499	51063						
	51064						
	51065						
PL cost							\$21,956,599.92
Non- PL cost							\$16,341,039.91
Total Benefit				\$38,297,639.83			

Repeat spinal surgery

The number of patients having repeat spinal surgery was 1359 (11.63%) out of which 1086 patients (80%) had surgery that *did not* involve revision of a previous spinal fusion. The average number of days between surgery was 325.

Miscellaneous Fraud, Waste and Abuse

We have focused on obvious FWA in this report but there is much more. We found scattered FWA right across the data, as figure 57, which was an early run, demonstrates. Knowing what we were looking for we were able to commence by highlighting myriad MBS items where we expected to find FWA, which proved correct. However, we chose not to examine some areas, though we recommend they be considered for future analysis. These include:

1. Excess pathology. We noticed high rates of patients being grouped and x-matched where there may not have been clinical indications for this, as well as excessive use of general blood chemistry.
2. Excess imaging. There were very high rates of chest x-rays, some of which were unlikely to have been necessary or may not have been done at all.
3. Unnecessary ECGs. We were unsurprised by this because it is prevalent right across the Medicare system, but there was clear evidence in the data suggesting many ECGs may not have been necessary or may not have been performed.
4. We noted GPs providing hospital services, which is common. Synapse has a number of GP clients who provide inpatient services to private hospitals. However, in some circumstances the GPs in the data appeared to be either billing for services that were not provided or were unnecessary.

In one case a patient was seen three times by GPs for allegedly over 25 minutes each time, during the patient's overnight admission for minor surgery. The patient would have been asleep for most of this time and the MBS items billed cannot be claimed if patients are asleep.

5. Neurosurgeon billing of attendance items. We found a high rate of neurosurgeons billing the initial consultation item 6007 on the day of surgery. We suggest it is implausible that the neurosurgeon has never seen the patient before they are about to operate on them. What is likely to be happening is that neurosurgeons are billing item 104 in their rooms when they see the patient for the first time. They likely charge the patient a private fee on that occasion. Neurosurgeons should not use item 104 but are able to because of structural problems in the Medicare system that are beyond the scope of this report to discuss. However, as a result, a second initial consultation is available to neurosurgeons at the time of admission to hospital. This is another area of obvious waste requiring further investigation.
6. Egregious claiming of the high paying item 141 by geriatricians. We found several instances where geriatricians had claimed this item completely implausibly. One was claimed on a patient who had a minor procedure and went home the same day. It was not only highly unlikely that this service was provided but it would likely have involved theft of a GP referral. This is because item 141 will be rejected unless a GP referral is inserted into the claim prior to transmission, and the only GP referral in the patient's file would usually be the referral to the surgeon.
7. Questionable use of the resuscitation items 160 and 161. We found a frequent flyer physician who was the sole repeat user of item 161 (one other medical practitioner claimed a few item 160s). Item 161 involves 2-3 hours in direct attendance with a desperately ill patient who is in imminent danger of death, to save their life. Item 160 requires 1-2 hours for the same reason. In our experience these items are rarely used and usually seen billed in the context of cardiac arrest or uncontrolled haemorrhage. One practitioner in the data was a clear outlier as a user of these items and should be investigated.

8. Questionable use of case conference items by physicians. Mostly items 830 and 834. These claims are very likely to be fraudulent, where the service was not provided at all, particularly where there was a short LOS. This also warrants further investigation.
9. Highly questionable billing of item 51141 by spinal surgeons who billed for revision surgery on 4 or more levels of the spine, but the previous spinal fusion surgery was only done on 3 levels, making this impossible. The average PHI gapcover fee for the lower paying item 51140 is around \$750, whereas the average fee for item 51141 is almost double, around \$1,400. Some workers compensation insurers pay up to \$3,000 for item 51141.
10. Overpayment of the surgical assistant item 51303. Surgical assistants receive 20% of the surgeon's fee for each surgery, and the calculation is based on the surgeon's MBS items. Therefore, every time a surgeon claims for services not provided, or services more complex than those provided attracting higher rebates, that inflates the amount the surgical assistant receives as well. So, for every extra \$100 claimed by the surgeon, an extra \$20 is added to the assistant's claim for item 51303. This is likely to be a significant figure and should be investigated because spinal surgery is very expensive and most spinal surgery includes a surgical assistant claim.

Figure 57 - Miscellaneous fraud, waste and abuse

AGE	LOS	MBS																							
			110	110	116	116	116	116	13870	13870	13873	13873	13873	13873	13876	13876	13876	13876	17610	17610	20600	20600			
47	2	110	110	116	116	116	116	13870	13870	13873	13873	13873	13873	13876	13876	13876	13876	17610	17610	20600	20600	20600			
65	1	60	11700	13870	13873	13876	13876	13882	13882	17610	17610	17610	17640	21990	21990	21990	21990	22012	22012	22012	22025	22025			
46	2	6011	13870	13873	13876	13876	17610	20600	22012	22025	23091	51011	51011	51011	51011	51021	51021	51021	51021	51041	51041	51041			
74	2	110	141	2801	6011	6013	6013	13870	13873	13876	13876	17610	20670	22012	22012	22018	22020	22025	23117	25015	51011	51011			
43	2	116	116	116	132	133	133	6013	6013	13870	13873	13876	13876	17615	20600	22012	22025	23111	51011	51011	51011	51021			
41	2	132	13870	13873	13876	13876	17610	20630	22012	22025	23114	51011	51021	51041	51303	55036	65070	65070	65070	65070	65070	65070			
65	2	13870	13873	13876	13876	17610	20600	22012	22025	23113	51012	51022	51042	51120	51303	58503	58503	65059	65070	65070	65129	65129			
15	2	17610	20670	22002	22012	22012	22020	22025	23840	25000	51026	51036	51303	57341	58503	58503	65070	65070	65105	65109	65129	65129			
60	2	11705	13870	13873	13876	13876	17610	20600	22012	22025	23114	25000	51011	51021	51041	51303	56220	65056	65070	65070	65093	65093			
67	1	13870	13873	13876	13876	17615	20600	22012	22025	23101	25000	51011	51021	51041	51303	51303	51303	51303	51303	58100	60509	60509			
76	2	110	11705	18276	18276	20670	23190	25014	49300	49300	49300	49300	51011	51011	51031	51031	51041	51041	51120	51120	51303	51303			
76	2	116	133	133	6011	13870	13873	13876	13876	17620	20630	22012	22025	23091	25000	25015	51011	51303	58503	60506	65070	65070			
49	2	6011	11021	11024	13870	13873	13876	13876	17610	20600	22012	22025	23112	51013	51023	51043	60509	65070	65070	65096	65123	65123			
51	2	13870	13873	13873	13876	13876	17610	17645	18232	20600	22012	22025	23118	51011	51131	51303	58100	60509	65070	65070	65096	65123			
73	2	110	116	116	13870	13873	13876	13876	17610	20670	22012	22025	23101	25000	25015	51011	51021	51041	51303	58100	58503	58503			
54	1	110	13870	13873	13876	13876	17610	20600	22014	22025	23116	51011	51021	51041	51131	58100	65070	65070	65096	65129	66512	66512			
61	1	13870	13873	13876	13876	17610	20600	22012	22025	23072	25020	51011	51021	51041	51303	56220	65070	65070	65070	65129	65129	65129			
72	1	13870	13873	13876	13876	17615	20670	22001	22002	22012	22018	22025	23380	25000	25015	51012	51022	51042	51303	58503	60506	60506			
38	1	13870	13873	13876	17610	20620	22012	22025	23113	25000	51011	51131	51303	58503	60509	65070	65070	65129	65129	66512	66512	66512			
59	2	110	110	116	116	116	11700	13870	13873	13876	13876	17610	20670	22012	22018	22025	23118	25000	51023	51041	51120	51120			
56	2	13870	13873	13876	13876	17610	20600	22012	22025	23101	51011	51021	51041	51120	51303	60509	65070	65070	65129	65129	66512	66512			
47	2	132	133	2801	6007	13870	13873	13876	13876	17615	20600	22012	22025	23117	51012	51012	51042	51303	60506	65070	65070	65070			
51	2	59	60	11705	11705	13870	13873	13876	13876	17615	20600	22012	22025	23119	51011	51021	51041	51120	51303	58100	60506	60506			
47	2	6007	6009	13870	13873	13876	13876	17610	18276	20600	22012	22018	22025	23119	47930	51011	51022	51042	51120	51131	51140	51140			
49	2	13870	13873	13876	13876	17610	20600	22012	22025	23112	51011	51021	51041	51120	51303	60509	65070	65070	65129	65129	66512	66512			
71	2	133	13870	13873	13873	13876	13876	17610	20670	22012	22025	23115	25000	51012	51021	51041	51131	51303	60506	65070	65070	65070			
79	2	13870	13873	17610	20600	22012	22025	23116	25015	51011	51021	51041	51303	58100	58503	60509	65070	65070	65129	65129	66512	66512			
64	2	2801	6009	6011	13870	13873	13876	13876	17610	17650	20620	22014	22025	23113	51011	51303	60509	65070	65070	65070	65123	65123			
70	2	13870	13873	13876	13876	51011	51011	51021	51021	51041	51041	51120	51303	51303	56220	56220	58503	58503	60509	60509	65070	65070			
67	2	13870	13873	13873	13876	13876	17615	18222	18222	18222	20670	22012	22025	23230	25000	51012	51032	51042	51032	51042	51303	56223			
67	1	13870	13873	13876	13876	17610	20600	22012	22025	23101	51013	51023	51043	51303	51303	51303	51303	51303	51303	51303	65070	65070			
63	2	11700	13870	13873	13876	13876	17610	20670	22012	22025	23113	51011	51021	51041	51303	58100	60506	65070	65096	65123	65123	65123			
50	2	11705	13870	13873	13876	13876	17610	20600	22012	22025	23116	25000	51012	51022	51032	51303	60509	65070	65096	65123	65123	65123			
54	2	110	13870	13873	13876	13876	17610	20600	22012	22025	23111	25020	51011	51021	51041	51303	58100	58503	60509	65070	65129	65129			
63	2	13870	13873	13876	17610	20600	22012	22025	23111	25000	51011	51021	51041	51303	58503	58503	60509	65070	65070	65129	65129	65129			
64	2	132	6011	11700	13870	13873	17615	17650	17650	17650	20630	22007	23112	51012	51303	57360	65070	65070	66500	66512	66512	66512			
39	2	6009	13870	13873	13876	13876	17615	18252	20600	22012	22025	23240	25000	51012	51022	51042	51303	58100	60509	65070	65070	65070			
64	2	11705	13870	13873	13876	13876	17610	20600	22012	22025	23121	51013	51022	51042	51131	51303	60509	65070	65096	65123	65123	65123			
66	2	11700	13842	13842	13870	13873	13876	17610	20600	22012	22012	22018	22025	23102	25000	51012	51303	60509	65070	65096	65129	65129			
70	2	13870	13876	13876	17615	20670	22012	22012	22020	22025	23116	25000	51012	51022	51032	51042	51303	58503	58503	60509	65070	65070			
73	1	11700	17610	17610	20630	20630	22012	22012	22025	22025	23112	23112	25000	25000	25015	25015	60509	65070	65070	65126	66512	66512			
72	2	116	116	116	116	6013	13870	13873	17615	20630	22012	22018	22025	23112	25005	51011	51021	51041	51303	58100	60509	65070			
75	2	13870	13873	13876	13876	17610	20600	22012	22025	23112	25005	25015	51011	51021	51041	51303	58100	60509	65070	65096	65129	65129			
43	2	13870	13873	51011	51021	51041	51303	58100	58503	58503	60509	65070	65070	65096	65129	65129	65129	65129	66512	66512	66512	66566			
65	2	60	65	110	17610	20600	22012	22018	22025	23190	25000	51011	51303	60506	65070	66506	66512	66512	66563	66569	66698	66698			
80	2	13870	13873	13876	13876	17610	20630	22014	22025	23065	25000	25014	51012	51303	65070	65070	65096	65129	65129	66512	66512				

Conclusion

Our analysis of patients having repeat spinal surgeries within one year resulted in a concerning high incidence of this phenomenon at over 11.5 percent, likely representing waste. In addition, patients having spinal fusion surgery for low back pain in breach of a Medicare rule was seven percent, at a cost of over \$61 million. While we note that poor clinical documentation or poor clinical coding practice may impact this result, when coupled with the repeat surgery rates and the very high rates of other types of FWA that were evident in the data, and the lack of checks and controls in the Australian Medicare system, the project team reached consensus that the rate of losses in this data are likely to be at the higher end of the spectrum compared to other data sets we have seen and international reporting of the same phenomenon. This would equate to over 20 percent, though it could be much higher. It is not possible to be definitive about how much of the behaviours we have identified are fraud, versus waste and abuse. But ultimately, that distinction is immaterial to overall loss rates.

In coming to this conclusion, it is important to reiterate the three distinct phenomena that were included in our analysis. The first is fraud (eg, billing for services that were not provided, or that were longer or more complex than those provided), the second is waste (eg, legal double dipping by anaesthetists, performing surgery that will not benefit the patient), and third is abuse (eg, billing spinal fusion surgery on patients with chronic low back pain or admitting patients to ICU who don't need to be there). We did not consider error rates, though they are also a factor that inflates losses.

Focusing just on fraud for a moment, it is an area where unconscious bias is common, and euphemisms are frequently used to describe criminal behaviour. Common euphemisms are: overservicing, overcharging, inappropriate practice, rorting, and unsatisfactory professional conduct. Fraud is a criminal offence involving obtaining a financial benefit by deception. The reality is that much of what we, in Australia, describe using euphemisms, is fraud. The former Director of the PSR has confirmed this (emphasis added) when she said:

*"Then there are doctors who are billing for patients who are not physically present, or services not physically performed. **Really, it's fraud**, but it's very difficult. Sometimes we speak to the police and the Department of Health about whether we make these criminal investigations or just administrative. But the current line has been a large majority of the cases has stayed with the PSR for administrative inappropriate practice."⁴¹*

A good example demonstrating how deep Australia has descended into the normalisation of fraud is found in an article from Sydney University which was published in April 2023.⁴² The article described 29.6% of GPs dishonestly billing Medicare for longer services than those they provided "at least once" even when they knew their billing behaviour was being watched. The correct legal description for this conduct is fraud, but the authors euphemistically called it overcharging. The authors then proceeded to argue that dishonestly stealing from the government was acceptable for GPs, because by not being dishonest other times, they provided a net benefit to the community. The arguments were as outrageous as they were breathtakingly ignorant of the law. It is not open under Australian law to argue for example, that 30% of people speed, but because those same people drive under the speed limit other times, they provide a net benefit to road users and shouldn't get speeding tickets. We cannot argue that we mostly don't steal to avoid going to jail. When a GP (or any medical practitioner) is found guilty of billing for services longer than those provided, the law requires they repay the full amount. There is no ability to put forward reckless arguments like those proffered by the Sydney University authors and do a net benefit calculation to reduce the amount they repay, nor should there be. Such arguments undermine the rule of law by suggesting doctors (in this case GPs) are above it. But not only were these arguments published, they were celebrated.

Healthcare fraud is characterised by high volumes of low value crimes, many of which appear perfectly normal and correct. This is precisely where criminals operate knowing that as long as they bill their lies correctly, they are unlikely

41. Siobhan Calafiore. Doctors are better off with the PSR than the police: watchdog director. Australian Doctor News. 9 June 2022.

42. Under or Over? GP charging of Medicare. <https://www1.racgp.org.au/ajgp/2023/april/general-practitioner-charging-of-Medicare>.

to get caught because their crimes will remain invisible and extremely difficult to detect. Our analysis has highlighted the levels to which this is occurring in Australia. The entire data of 79,725 lines and over \$640 million was paid, yet it was littered with invisible fraud, as well as waste and abuse.

The truth is that no-one has ever conducted a statistically valid measurement of the rates of FWA in the Australian Medicare and PHI programs and without this, true loss rates remain unknown. However, it is not unrealistic to suggest that FWA rates in Australia may be some of the highest in the world given Australia's fee-for-service payment system is almost completely devoid of controls and is largely unpoliced.

A unique component of effective FWA investigations involves looking at behaviours in the context of the history of both the practitioner and patient. This is in sharp contrast to the approach of most payers who simply look at the transaction in front of them in isolation. An example of this is the use of invasive monitoring. We noted a large number of arterial line insertions in the data. There may of course be circumstances where insertion of an arterial line is justified even in a one or two level posterior spinal fusion, but where this behaviour occurs repeatedly it becomes a matter of concern which should be investigated.

While we did not perform any work to validate the quality of the data, the findings were familiar. When medical treatment is paid for based on trust, and where there is no programme of checking and auditing, both of which are true in Australia, it is common for a culture to develop where claims are routinely exaggerated for financial gain.

In December 2023 a UK surgeon was convicted of fraud and forgery for his billing of meniscal repairs when he was really performing the lesser procedure of meniscectomy.⁴³ Three members of the Kirontech team testified at his trial. We found compelling evidence of similar conduct in this review. Based on our experience, it seemed likely that some of the spinal surgeries claimed were unlikely to have been performed. This was particularly evident in cases where the data suggested surgeons had performed surgery in an implausibly short time.

It is an unfortunate reality in the Australian Medicare system that the service performed, and the service billed can be very different, and will usually escape detection.

In the context of hospitalised patients with PHI having spinal surgery, the first bills to be paid are those of the medical practitioners involved in the case, and the surgeon's claims, in particular, generate a cascade of additional expenditure for the PHIs.

A unique feature of Australia's blended public/private health system is that the PHIs are legally required to pay for any service that Medicare has paid. The problem with this arrangement is that Medicare does not adequately assess incoming claims to check the veracity of the services allegedly provided. This renders the PHIs unable to control their expenditure and realise savings that could be passed to consumers. Therefore, even if the PHIs wanted to establish their own robust system of audit and policing it would be largely futile in the current policy setting.

Without major structural reform that releases the private insurers from the requirement to automatically pay everything that Medicare has paid, and cultural change, we do not see an end to the high rates of fraud, waste and abuse that are apparent within the Medicare and Private Health Insurance payment systems.

43. <https://www.kentonline.co.uk/dartford/news/senior-surgeon-found-guilty-of-fraud-and-forgery-298917/>

Limitations

We conducted a desktop analysis of claims data, and while some of the datasets were comprehensive, data analysis alone is never sufficient to uncover FWA.

For example, Dr. Margaret Faux was featured in a recent ABC 7:30 report by Adele Ferguson and Laura Francis called “Podiatrist’s questionable business practices expose the health payment system.”⁴⁴ In that program we uncovered a number of questionable practices and likely fraud as a result of a comprehensive program of work. Most importantly, the billing records only told part of the story and if we had relied solely on them, we would not have uncovered what we did. This is because the billing records often appeared correct. While there were high volumes of some services, it was not impossible that all services had been provided. It was only by digging deeper and having numerous detailed conversations with the patients and obtaining clinical and administrative records were we able to be certain that referrals were fake, face-to-face attendances were impossible (one patient lived in WA and the podiatrist was based in NSW) and the patients confirmed that most services had not been provided at all.

This notwithstanding, billing records are often the starting point for FWA investigations because they show investigators where to look. And the patient level data that we analysed for this project enabled us to unlock considerable findings strongly suggestive of serious FWA problems. However, further work should include reading associated clinical records and speaking with patients or in some instances their relatives. We strongly recommend that this further analysis be undertaken to validate our findings.

Another limitation is that we did not know what type of claims these were. In the Australian private hospital inpatient setting, there are multiple options available to medical practitioners. These include no-gap claims, known-gap claims, patient claims, contract rate claims and Medicare claims (including bulk billing and private fees). The claim type is very important in Australia because it introduces a whole raft of other types of illegal conduct, both civil and criminal. For example, it is a criminal offence to bulk bill and charge a separate gap when billing to Medicare,⁴⁵ and it is usually a breach of contract to charge booking, administration, and facility fees to patients prior to their surgery, particularly when using no-gap and known-gap schemes.⁴⁶ Yet we know that this conduct is prevalent among surgeons and anaesthetists.⁴⁷

In addition to a recent media report concerning this egregious conduct,⁴⁸ Dr. Faux often receives communications from patients who have been subject to illegal but invisible charges. In a recent example, Dr. Faux received a letter written by a medical administrator working for a large anaesthetic practice. In it 48 medical practitioners were named (anaesthetists, various types of surgeons and obstetricians) who have, for many years, been bulk billing and charging huge fees for the same service, and also putting through gapcover claims to the PHIs while at the same time charging fees that are well over the maximum \$500 known gap limit. She wrote:

“About 90% of our private patients are charged out of pocket costs ranging from 500 to 5000. On top of that all our patients with health insurance are also billed directly to the respective health fund as NO GAP claims. The rest are billed directly to Medicare as BULK BILL.”

The author then described several specific instances of obvious fraud, noting she herself has been involved in administering these illegal claims for many years, but only recently became aware it was illegal. She described being shocked and distressed but afraid of losing her job. When she spoke to her boss about it, she was told “It can’t be wrong if everyone is doing it.”

If we were to add this further illegal conduct to the present analysis, our estimates would increase significantly, because anaesthetists and surgeons are known perpetrators of these illegal charges, which are paid by patients while remaining invisible to the government and PHIs. We would expect that many of the private patients in this data had paid large, illegal, out-of-pocket fees for their surgery.

44. <https://www.abc.net.au/news/2023-10-24/questionable-business-practices-in-podiatry-revealed-730/103009694>

45. *Suman Sood v R* [2006] NSWCCA 114 and *Dalima Pty Limited v Commonwealth of Australia* Unreported, NSWSL, No 25304/87, 22 October 1987

46. This depends on the terms and conditions of each PHI, but all PHIs prohibit these types of charges in their current T&Cs.

47. Sydney Morning Herald. Mind the gap: At 40, Medicare feels the pain of age as patients pay more. <https://www.smh.com.au/politics/federal/mind-the-gap-at-40-Medicare-feels-the-pain-of-age-as-patients-pay-more-20240120-p5eytd.html>

48. Ibid

Opportunities for Further Analysis and Reform

There are numerous red flags in this data suggestive of widespread misbilling and wastage.

However, whilst the evidence is compelling, ultimately this is speculation since we do not have access to records and to the best of our knowledge no formal exercise has ever been conducted to quantify the scope and value of FWA in the Australian Healthcare System.

In our view, this situation is unacceptable given the amount of public money which is spent in the system and the fact that this is an essential service provided to the Australian public for which they pay a considerable sum of personal money if they take out private insurance.

We recommend that as a matter of priority an exercise is conducted so that the extent of misbilling and losses is quantified with certainty. In our opinion this is a feasible exercise which could initially be conducted in a limited area of billing such as we have done in a relatively short period of time. If the error rates are as high as our work suggests, a relatively small sample size should be sufficient to reach a valid conclusion.

The next stage in such a process would be to undertake a sampling exercise using a stratified sample of items from this report as well as some random sampling which are then compared to underlying records. These would be examined by a multi-disciplinary team composed of MBS experts, auditors with support from clinical coders and clinicians, and some input from statisticians. The outcome would be a report showing the scope and value of the misbilling. This would then form the basis of a programme to reduce losses.

This exercise would need to be conducted in a manner which was independent and transparent but free from vested interests – and by this we include the Australian Medical Association and Private Health Insurers. Whilst those who oppose such audit work almost always talk about confidentiality, this is largely a spurious concern. Much of the information about the claims has already been passed to the payor in any case and it is possible to put in place appropriate safeguards so that patient confidentiality is respected.

Such an exercise would assist in understanding the scope and value of the level of FWA in the claims. Once such an exercise has been conducted, and the situation is clearer, a solution can be developed. This might include:

- 1.** Severing the legal requirement that the PHIs must immediately pay any claim that Medicare has paid. This should include both hospital and medical bills and be done in a way that slows down the payment cycle and gives the PHIs time to investigate behaviours of concern.
- 2.** Communication and development of an “anti-fraud” culture whereby the perception that “gaming” the system is acceptable is changed in the way for example that has been done with traffic offences such as speeding. This should ideally be led by the federal government and would involve publicity and education. It also needs to involve all stakeholders.
- 3.** The need to provide legal education to medical practitioners on the operation of Medicare and correct use of the MBS cannot be overstated. Currently, there is none.⁴⁹
- 4.** Putting in place rules to flag transactions of concern before they are paid. A number of our findings could be dealt with in this way. Such rules operate in real time and can be very effective as a first line of defence although unless they are reviewed and updated, they tend to degrade in effectiveness over time.

49. Who teaches medical billing? A national cross-sectional survey of Australian medical education stakeholders. <https://bmjopen.bmj.com/content/8/7/e020712.share>

5. Regular retrospective analysis of pooled claims data to identify new trends which then feed new rules and direct audit work. This would have no net cost, as international experience shows that such teams return many times their running costs in savings.
6. Clarification of MBS codes where there is scope for genuine misunderstanding and reducing the scope for manipulation of the system. In particular, this should look at modifiers, codes based on time and anything where there is a high level of judgement. A possible framework for such reform, contextualised within Australia's unique regulatory environment, is already available in the academic literature.⁵⁰
7. Setting up a process whereby issues of concern can be reported confidentially.
8. Creation of a specialist team with the appropriate skills, authority, and capacity to audit claims and make recoveries. Given the way in which Medicare and the PHIs interrelate, we suggest this would be better as a public/private partnership.
9. Putting in place a program of proactive auditing and investigation as well as a system to deal with medical practitioners. As far as possible this should avoid criminal sanctions. Available evidence⁵¹ suggests this is better done through a civil process with an escalating series of remedies and sanctions starting with a simple request for repayment and information about correct billing with further sanctions for repeat offenders. Criminal prosecution, which has a very high burden of proof and potentially devastating consequences should only ever be a last resort for serious criminal fraud.
10. Trialing a limited system whereby whistleblowers who report certain types of fraud are paid, using an adapted version of the system in use in the USA.⁵²

Finally, any system of medical claims auditing and enforcement should be undertaken professionally by appropriately trained staff and must be conducted in a manner which is fair, transparent, legally proportionate, and accountable. It is essential that it has the confidence of the public, the medical profession and that of all stakeholders. Whilst it may be necessary to conduct some criminal prosecutions particularly in cases which involve serious deception for example altering of records or patient harm, the first line of sanctions should offer providers the opportunity to reflect on and amend their misconduct.

50. Ibid. UTS thesis collection. <https://opus.lib.uts.edu.au/handle/10453/155387>. Commencing at page 363.

51. Ibid. UTS thesis collection. <https://opus.lib.uts.edu.au/handle/10453/155387> at pages 10 and 374 and throughout.

52. Ibid. UTS thesis collection. <https://opus.lib.uts.edu.au/handle/10453/155387> from page 119. See sections relating to qui tam laws.

Appendices

Short bios of Drs Faux and Peck

Dr. Margaret Faux

Dr. Faux is a health system lawyer, senior executive, businesswoman, and academic with deep experience and knowledge of health regulation both in Australia and internationally. She has over four decades of experience in the health sector, having commenced her career with over a decade practising as a registered nurse. Margaret has a PhD on the legal and administrative operation of Australia's blended public/private health system Medicare and is also the founder and CEO of Synapse Medical, a leading global MedTech company offering digital health financing solutions and consulting.

Margaret has published over 200 articles on the operation of Medicare and the Australian health system in both academic literature and popular media. She is a regular contributor to the Australian health reform debate and is considered one of Australia's leading experts on the operation of the Australian health system. Her research interests are in the areas of health system codes and classifications, payment integrity, regulation, and digital enablement.

Margaret works in many international markets doing the same healthcare billing, coding, and consulting work and is currently leading a team who are developing the non-admitted casemix classification for the Kingdom of Saudi Arabia.

Dr. Simon Peck

Dr. Peck qualified as a doctor in 1984 and practiced in the UK NHS training in General Medicine and Anaesthesia. He is an accredited fraud investigator.

He spent most of his career in the medical team at AXA Health which is a UK-based provider of domestic and overseas health insurance where he set up and led the Audit and Investigations Team which made significant savings on hospital and practitioner billing. He has brought a number of significant cases to trial, some of which made the National Press. He has also referred medical practitioners for disciplinary, civil, or occasionally criminal prosecution. In 2015 his team's work in uncovering commission payments from private hospitals to medical practitioners resulted in a change in the law making most of these schemes illegal.

In 2021 he joined the team at Kirontech as Chief Medical Advisor having previously been their customer. He has delivered lectures and training across the world on the topic of health FWA.

Example of ICD codes for public hospital patients and the same codes for private hospital patients

Fund 1					
ICD	Description	Private	Public	Total	% in Public
M511	Lumbar and other intervertebral disc disorders with radiculopathy	1180	19	1199	2%
M4806	Spinal stenosis, lumbar region	1360	16	1376	1%
M5412	Muscle wasting and atrophy, not elsewhere classified, multiple sites	203	6	209	3%
G061	Intraspinal abscess and granuloma	1	6	7	86%
M512	Other specified intervertebral disc displacement	556	5	561	1%
M4807	Spinal stenosis, lumbosacral region	288	5	293	2%
M545	Other specified disorders of bone density and structure, other site	128	4	132	3%
G834	Cauda equina syndrome	7	4	11	36%
S1411	Complete lesion of cervical spinal cord		3	3	100%

Fund 2					
ICD	Description	Private	Public	Total	% in Public
M512	Other specified intervertebral disc displacement	31	2	33	6%
A4151	Sepsis due to Escherichia coli [E. Coli]		1	1	100%
M5322	Spinal instabilities, cervical region	2	1	3	33%
M966	Fracture of bone following insertion of orthopaedic implant, joint prosthesis, or bone plate		1	1	100%
S1223	Fracture of fifth cervical vertebra		1	1	100%
S1412	Central cord syndrome (incomplete cord injury) of cervical spinal cord		1	1	100%
S2204	Fracture of thoracic vertebra, T7 and T8 level		1	1	100%

Fund 6					
ICD	Description	Private	Public	Total	% in Public
M511	Lumbar and other intervertebral disc disorders with radiculopathy	1871	15	1886	1%
M4806	Spinal stenosis, lumbar region	2421	13	2434	1%
S1412	Central cord syndrome (incomplete cord injury) of cervical spinal cord	1	8	9	89%
M510	Lumbar and other intervertebral disc disorders with myelopathy	40	3	43	7%
M512	Other specified intervertebral disc displacement	849	3	852	0%
S1413	Other incomplete cord syndrome of cervical spinal cord		3	3	100%

Consolidated list of all MBS items

1247 Unique MBS item numbers used across all datasets																				
3	11003	15555	20806	23033	23430	30250	32139	37203	39119	41776	47729	49500	51063	55800	57515	61421	65070	66695	69479	72824
4	11012	15556	20810	23035	23440	30251	32150	37207	39125	41816	47738	49509	51064	55804	57521	61425	65072	66698	69480	72825
24	11015	15565	20820	23041	23450	30296	32175	37210	39126	41855	47771	49518	51065	55808	57523	61430	65075	66701	69481	72830
36	11018	15700	20830	23042	23460	30317	32222	37219	39127	41864	47786	49519	51066	55812	57527	61434	65078	66704	69482	72836
37	11021	15715	20832	23043	23470	30373	32227	37245	39128	41870	47920	49527	51071	55816	57703	61449	65084	66707	69494	72846
47	11024	17610	20840	23045	23480	30376	32229	37300	39130	41879	47927	49561	51073	55824	57709	61473	65090	66716	69495	72847
58	11027	17615	20841	23051	23490	30378	32523	37324	39131	41880	47929	49703	51102	55828	57712	61505	65093	66719	69496	72848
59	11503	17620	20862	23052	23500	30379	32712	37327	39133	41881	47930	49800	51103	55844	57715	61523	65096	66722	69499	72849
60	11512	17625	20880	23053	23510	30384	33136	38200	39134	41889	47954	49866	51110	55848	57901	61529	65099	66725	69506	72850
65	11602	17640	20884	23055	23520	30385	33521	38212	39135	41892	47972	50104	51111	55850	57907	61553	65105	66734	69511	72851
104	11610	17645	20902	23061	23540	30390	33542	38215	39136	41898	47975	50115	51113	55856	57939	63001	65108	66752	69512	72855
105	11700	17650	20910	23062	23550	30393	33806	38218	39137	42530	47978	50121	51114	55860	57960	63004	65109	66755	69513	72856
110	11701	17655	20912	23063	23560	30396	33815	38240	39138	43512	48239	50200	51120	55864	58100	63007	65110	66758	71057	72857
111	11702	17690	20914	23065	23570	30403	33818	38241	39139	43915	48242	50201	51130	55866	58103	63010	65111	66764	71058	72860
115	11704	18216	20930	23071	23580	30405	33833	38243	39140	43981	48245	50203	51131	55868	58106	63043	65114	66767	71059	73045
116	11705	18222	21114	23072	23590	30406	33836	38244	39300	45000	48251	50218	51140	55870	58108	63046	65117	66770	71060	73047
117	11707	18225	21170	23073	23600	30439	33839	38246	39312	45006	48406	50221	51141	55876	58109	63049	65120	66773	71062	73049
119	11708	18230	21200	23075	23620	30440	34103	38248	39321	45012	48409	50224	51145	55880	58112	63055	65123	66776	71064	73290
132	11709	18232	21210	23081	23630	30445	34151	38249	39323	45018	48423	50303	51150	55886	58115	63058	65126	66779	71066	73308
133	11712	18233	21270	23082	23640	30451	34527	38251	39324	45203	48424	50604	51160	55888	58306	63064	65129	66800	71068	73317
141	11713	18252	21380	23083	23650	30473	34528	38254	39327	45206	48427	50608	51165	56001	58503	63111	65137	66803	71071	73320
143	11714	18254	21460	23085	23660	30475	34530	38256	39330	45442	48612	50620	51170	56007	58506	63114	65144	66812	71073	73325
160	11721	18256	21461	23091	23670	30478	34812	38270	39331	45451	48613	50628	51171	56030	58521	63125	65147	66819	71075	73332
161	11727	18258	21480	23101	23700	30481	35003	38287	39603	45512	48615	50632	51300	56101	58715	63151	65150	66822	71079	73336
214	11919	18260	21620	23111	23710	30484	35100	38300	39604	45518	48618	50636	51303	56107	58903	63154	65156	66830	71085	73337
215	12005	18262	21622	23112	23720	30485	35200	38306	39641	45563	48624	50644	51306	56219	58909	63161	65175	66833	71097	73436
297	12203	18266	21670	23113	23730	30491	35202	38307	39651	45590	48627	51011	51312	56220	58912	63164	65178	66838	71099	73529
320	12204	18270	21810	23114	23740	30566	35300	38316	39700	45885	48636	51012	52025	56221	59700	63167	65179	66839	71101	73924
322	12205	18272	21912	23115	23800	30583	35303	38320	39709	45900	48639	51013	52800	56223	59718	63170	66500	66840	71103	73925
324	12250	18274	21916	23116	23820	30597	35306	38353	39710	45993	48640	51014	55028	56224	59724	63173	66503	66841	71106	73926
326	12306	18276	21922	23117	23840	30614	35309	38356	39712	46336	48642	51015	55032	56225	59912	63176	66506	69300	71119	73928
328	12312	18278	21936	23118	23940	30648	35321	38365	39715	46339	48645	51020	55036	56226	59925	63179	66509	69303	71121	73929
348	12315	18286	21939	23119	25000	30651	35330	38368	39903	46450	48648	51021	55037	56233	59970	63182	66512	69306	71123	73930
350	12320	20120	21941	23121	25005	30654	35331	38418	40003	46495	48651	51022	55038	56237	60009	63185	66518	69309	71125	73931
519	13400	20170	21945	23170	25010	30692	35412	38419	40004	46501	48654	51023	55048	56301	60012	63191	66519	69312	71139	73937
585	13703	20210	21990	23180	25014	30721	35414	38420	40009	47009	48657	51024	55054	56307	60021	63201	66536	69317	71143	73938
591	13706	20216	22001	23190	25015	30722	35513	38421	40012	47042	48660	51025	55065	56407	60024	63204	66539	69318	71145	73939
594	13757	20220	22002	23200	25020	30724	35568	38424	40018	47048	48663	51026	55070	56409	60027	63222	66542	69321	71147	73940
599	13815	20305	22007	23210	25025	30725	35613	38427	40100	47362	48666	51031	55076	56412	60030	63225	66551	69324	71153	91832
600	13830	20320	22008	23220	25200	31345	35630	38430	40104	47370	48669	51032	55113	56501	60033	63231	66560	69327	71155	92701
826	13839	20350	22012	23230	25205	31350	36561	38436	40106	47372	48672	51033	55114	56507	60036	63234	66563	69330	71157	92712
830	13842	20420	22014	23240	30001	31358	36615	38446	40300	47381	48675	51034	55115	56619	60045	63237	66566	69333	71159	99999
832	13857	20500	22015	23250	30023	31363	36624	38448	40301	47465	48678	51035	55116	56620	60048	63240	66569	69336	71163	0998R
834	13870	20520	22018	23260	30024	31366	36650	38452	40303	47477	48681	51036	55117	56622	60057	63243	66572	69339	71164	0MISC
861	13873	20540	22020	23270	30026	31376	36800	38456	40306	47480	48684	51041	55118	56623	60060	63271	66575	69345	71165	MISC
871	13876	20560	22025	23280	30038	31409	36803	38502	40309	47489	48687	51042	55126	56627	60072	63274	66578	69354	71166	0XMM
872	13881	20600	22031	23290	30049	31426	36806	38513	40321	47519	48690	51043	55127	56630	60075	63277	66581	69357	71167	RECIP
880	13882	20604	22036	23300	30068	31450	36809	38643	40330	47565	48691	51044	55129	56801	60078	63301	66584	69360	71168	-
2801	13885	20620	22040	23310	30075	31456	36812	38647	40331	47566	48692	51045	55130	56807	60500	63304	66593	69363	71169	-
2806	13888	20630	22041	23320	30081	31458	36818	38803	40333	47573	48693	51051	55133	57001	60503	63322	66596	69378	71170	-
2814	13915	20632	22051	23330	30084	31584	36821	38806	40334	47594	48694	51052	55145	57007	60506	63325	66605	69384	71183	-
3005	13918	20670	22060	23340	30087	31587	36824	39000	40335	47595	48909	51053	55238	57341	60509	63328	66623	69387	71186	-
3010	13950	20680	22065	23350	30093	32000	36833	39013	40336	47600	48948	51054	55244	57350	61109	63482	66626	69390	71198	-
3069	14209	20690	23010	23360	30094	32009	36840	39014	40600	47603	48951	51055	55246	57351	61307	63491	66629	69396	71200	-
6007	14218	20706	23021	23370	30097	32030	36842	39015	40800	47612	48954	51056	55248	57352	61324	63494	66632	69400	72813	-
6009	14221	20740	23022	23380	30216	32072	36845	39018	40803	47618	49212	51057	55252	57353	61345	63496	66635	69405	72814	-
6011	15257	20745	23023	23390	30223	32084	36854	39110	40862	47699	49300	51058	55274	57354	61348	63497	66650	69471	72816	-
6013	15272	20770	23025	23400	30224</															

Consolidated list of all ICD codes and DRGs

523 unique ICD Codes used across all datasets									81 Unique DRGs - All dataset			
A244	G542	K590	M4194	M4697	M4954	M5495	Q7649	S343	801A	B71B	I09B	K05A
A410	G543	K8010	M4195	M4698	M4956	M5496	Q850	S390	801B	B82B	I09C	L09B
A4151	G544	K868	M4196	M4702	M500	M5497	R13	S398	801C	B82C	I10A	O65A
A419	G548	L8900	M4197	M4706	M501	M5498	R202	S4222	901Z	D02B	I10B	R01A
A4901	G549	L970	M4198	M4712	M502	M5499	R2988	S434	A06B	D06Z	I12A	R01B
B258	G550	L979	M4199	M4713	M503	M6028	R33	S460	A11A	E71A	I12C	R02C
B952	G551	M1288	M4204	M4714	M508	M6250	R398	S798	A12Z	F12B	I23Z	R61B
C349	G552	M1398	M4205	M4716	M509	M6281	R418	S8281	A14B	F14A	I28A	T01A
C412	G553	M161	M4300	M4722	M510	M6748	R509	S899	B02B	F14C	I28B	T01B
C470	G560	M171	M4302	M4723	M511	M6786	R51	T093	B02C	F16Z	I30Z	T01C
C479	G562	M1908	M4306	M4726	M512	M712	R522	T179	B03A	F73B	I65A	U63A
C496	G570	M2137	M4307	M4727	M513	M7138	R529	T402	B03B	F76A	I65B	W02B
C61	G571	M2325	M4310	M4728	M518	M7139	R55	T810	B03C	F76B	I68A	W04B
C64	G578	M2428	M4312	M4782	M519	M7922	R58	T813	B06B	G10B	I68B	X06A
C701	G5811	M2466	M4313	M4783	M531	M7926	S065	T814	B07B	H02A	I68C	X06B
C713	G588	M2484	M4314	M4784	M5321	M7928	S069	T8183	B60A	I02A	I69B	X63B
C720	G589	M2506	M4315	M4786	M5322	M7962	S120	T8189	B60B	I02B	I71B	Z01A
C760	G610	M2508	M4316	M4787	M5323	M7964	S121	T840	B61A	I04B	I73B	Z01B
C794	G629	M2551	M4317	M4788	M5324	M7965	S1221	T842	B61B	I06Z	I76B	-
C795	G710	M2555	M4318	M4790	M5325	M7966	S1222	T843	B70A	I08A	J11Z	-
C7988	G728	M2556	M432	M4792	M5326	M7967	S1223	T844	B71A	I09A	J12C	-
C821	G8220	M2558	M4322	M4794	M5327	M7969	S1224	T846				
C833	G8226	M2578	M4324	M4795	M5328	M7986	S1225	T847				
C851	G831	M2588	M4326	M4796	M533	M7988	S130	T8481				
C900	G832	M2595	M4327	M4797	M5382	M8058	S1314	T8483				
C9000	G834	M2598	M4352	M4798	M5383	M8098	S1315	T8485				
C9020	G8389	M349	M4353	M4800	M5384	M8168	S1316	T8489				
C9030	G912	M350	M4356	M4801	M5385	M8408	S132	T849				
D097	G930	M4013	M436	M4802	M5386	M8415	S134	T851				
D166	G932	M4016	M437	M4803	M5387	M8418	S140	T8569				
D177	G938	M4022	M4380	M4804	M5388	M8448	S1410	T8572				
D179	G950	M4023	M4384	M4805	M5392	M8568	S1411	T8581				
D1808	G951	M4024	M4396	M4806	M5393	M8588	S1412	T8583				
D213	G952	M4025	M4397	M4807	M5396	M8618	S1413	T8585				
D320	G958	M4026	M4399	M4808	M5397	M8688	S212	T8588				
D321	G959	M4027	M4502	M4809	M5399	M8698	S2201	T886				
D361	G960	M4029	M4506	M4812	M5412	M8938	S2202	Z000				
D421	G961	M4035	M4509	M482	M5413	M8988	S2203	Z4581				
D431	G968	M4036	M4607	M4826	M5414	M9078	S2204	Z4589				
D434	G970	M4057	M461	M483	M5415	M960	S2205	Z462				
D447	G9711	M4110	M4624	M4832	M5416	M961	S2206	Z470				
D480	G9731	M4114	M4625	M484	M5417	M963	S221	Z514				
D500	G978	M4115	M4626	M4844	M5418	M966	S222	Z7511				
D649	G98	M4119	M4627	M4846	M5419	M968	S2412	-				
D682	G992	M4124	M4632	M485	M542	N140	S3201	-				
E1141	H811	M4125	M4636	M4852	M543	N179	S3202	-				
E1142	I209	M4135	M4637	M4854	M544	N390	S3203	-				
E119	I2511	M4149	M4642	M4856	M545	O9932	S3204	-				
E211	I481	M4154	M4644	M4857	M546	O998	S3205	-				
E222	I489	M4155	M4645	M486	M5482	Q0570	S321	-				
E834	I639	M4156	M4646	M487	M5483	Q068	S3282	-				
F101	I728	M4180	M4654	M4882	M5484	Q069	S3289	-				
F102	J189	M4183	M4682	M4883	M5485	Q070	S330	-				
F311	J342	M4184	M4684	M4886	M5486	Q273	S3312	-				
G061	J392	M4185	M4686	M4887	M5487	Q6751	S3313	-				
G062	J46	M4186	M4687	M4892	M5488	Q7409	S3314	-				
G20	J690	M4187	M4692	M4896	M5489	Q7621	S3315	-				
G318	K224	M4189	M4694	M4897	M5492	Q7634	S3351	-				
G439	K439	M4190	M4695	M4904	M5493	Q7639	S337	-				
G540	K510	M4192	M4696	M4952	M5494	Q7643	S341	-				

Item 132, 133 and 834 full requirements

Category 1 – PROFESSIONAL ATTENDANCES

132

Professional attendance by a consultant physician in the practice of the consultant physician's specialty (other than psychiatry) of at least 45 minutes in duration for an initial assessment of a patient with at least 2 morbidities (which may include complex congenital, developmental and behavioural disorders) following referral of the patient to the consultant physician by a referring practitioner, if:

- (a) an assessment is undertaken that covers:
 - (i) a comprehensive history, including psychosocial history and medication review; and
 - (ii) comprehensive multi or detailed single organ system assessment; and
 - (iii) the formulation of differential diagnoses; and
- (b) a consultant physician treatment and management plan of significant complexity is prepared and provided to the referring practitioner, which involves:
 - (i) an opinion on diagnosis and risk assessment; and
 - (ii) treatment options and decisions; and
 - (iii) medication recommendations; and
- (c) an attendance on the patient to which item 110, 116 or 119 applies did not take place on the same day by the same consultant physician; and
- (d) this item has not applied to an attendance on the patient in the preceding 12 months by the same consultant physician

Fee: \$294.85 **Benefit:** 75% = \$221.15 85% = \$250.65

(See para [AN.0.7](#), [AN.0.23](#), [AN.40.1](#) of explanatory notes to this Category)

Category 1 – PROFESSIONAL ATTENDANCES

133

Professional attendance by a consultant physician in the practice of the consultant physician's specialty (other than psychiatry) of at least 20 minutes in duration after the first attendance in a single course of treatment for a review of a patient with at least 2 morbidities (which may include complex congenital, developmental and behavioural disorders) if:

- (a) a review is undertaken that covers:
 - (i) review of initial presenting problems and results of diagnostic investigations; and
 - (ii) review of responses to treatment and medication plans initiated at time of initial consultation; and
 - (iii) comprehensive multi or detailed single organ system assessment; and
 - (iv) review of original and differential diagnoses; and
- (b) the modified consultant physician treatment and management plan is provided to the referring practitioner, which involves, if appropriate:
 - (i) a revised opinion on the diagnosis and risk assessment; and
 - (ii) treatment options and decisions; and
 - (iii) revised medication recommendations; and
- (c) an attendance on the patient to which item 110, 116 or 119 applies did not take place on the same day by the same consultant physician; and
- (d) item 132 applied to an attendance claimed in the preceding 12 months; and

(e) the attendance under this item is claimed by the same consultant physician who claimed item 132 or a locum tenens; and

(f) this item has not applied more than twice in any 12 month period

Fee: \$147.65 **Benefit:** 75% = \$110.75 85% = \$125.55

(See para [AN.0.7](#), [AN.0.23](#), [AN.40.1](#) of explanatory notes to this Category)

Category 1 – PROFESSIONAL ATTENDANCES

AN.0.23

Referred Patient Consultant Physician Treatment and Management Plan (Items 132 and 133)

Patients with at least two morbidities which can include complex congenital, development and behavioural disorders are eligible for these services when referred by their referring practitioner.

Item 132 should include the development of options for discussion with the patient, and family members, if present, including the exploration of treatment modalities and the development of a comprehensive consultant physician treatment and management plan, with discussion of recommendations for services by other health providers as appropriate.

Item 133 is available in instances where a review of the consultant physician treatment and management plan provided under item 132 is required, up to a maximum of two claims for this item in a 12 month period. Should further reviews of the consultant physician treatment and management plan be required, the appropriate item for such service/s is 116.

Where a patient with a GP health assessment, GP management plan (GPMP) or Team Care Arrangements (TCA's) is referred to a consultant physician for further assessment, it is intended that the consultant physician treatment and management plan should augment the GPMP or TCA's for that patient.

Preparation of the consultant physician treatment and management plan should be in consultation with the patient. If appropriate, a written copy of the consultant physician treatment and management plan should be provided to the patient. A written copy of the consultant physician treatment and management plan should be provided to the referring medical practitioner, usually within two weeks of the consultant physician consultation. In more serious cases, more prompt provision of the plan and verbal communication with the referring medical practitioner may be appropriate. A guide to the content of such consultant physician treatment and management plans which are to be provided under this item is included within this Schedule.

(Note: This information is provided as a guide only and each case should be addressed according to a patient's individual needs.)

REFERRED PATIENT CONSULTANT PHYSICIAN TREATMENT AND MANAGEMENT PLAN

- The following content outline is indicative of what would normally be sent back to the referring practitioner.
- The consultant physician treatment and management plan should address the specific questions and issues raised by the referring practitioner.

History

The consultant physician treatment and management plan should encompass a comprehensive patient history which addresses all aspects of the patient's health, including psychosocial history, past clinically relevant medical history, any relevant pathology results if performed and a review of medication and interactions. There should be a particular focus on the presenting symptoms and current difficulties, including precipitating and ongoing conditions. The results of relevant assessments by other health professionals, including GPs and/or specialists, including relevant care plans or health assessments performed by GPs under the Enhanced Primary Care and Chronic Disease Management should also be noted.

Examination

A comprehensive medical examination means a full multi-system or detailed single organ system assessment. The clinically relevant findings of the examination should be recorded in the management plan.

Diagnosis

This should be based on information obtained from the history and medical examination of the patient. The list of diagnoses and/or problems should form the basis of any actions to be taken as a result of the comprehensive assessment. In some cases, the diagnosis may differ from that stated by the referring practitioner, and an explanation of why the diagnosis differs should be included. The report should also provide a risk assessment, management options and decisions.

Management plan

Treatment options/Treatment plan

The consultant physician treatment and management plan should include a planned follow-up of issues and/or conditions, including an outline of the recommended intervention activities and treatment options. Consideration should also be given to recommendations for allied health professional services, where appropriate.

Medication recommendations

Provide recommendations for immediate management, including the alternatives or options. This should include doses, expected response times, adverse effects and interactions, and a warning of any contra-indicated therapies.

Social measures

Identify issues which may have triggered or are contributing to the problem in the family, workplace or other social environment which need to be addressed, including suggestions for addressing them.

Other non medication measures

This may include other options such as life style changes including exercise and diet, any rehabilitation recommendations and discussion of any relevant referrals to other health providers.

Indications for review

It is anticipated that the majority of patients will be able to be managed effectively by the referring practitioner using the consultant physician treatment and management plan. If there are particular concerns about the indications or possible need for further review, these should be noted in the consultant physician treatment and management plan.

Longer term management

Provide a longer term consultant physician treatment and management plan, listing alternative measures that might be taken in the future if the clinical situation changes. This might be articulated as anticipated response times, adverse effects and interactions with the consultant physician treatment and management plan options recommended under the consultant physician treatment and management plan.

Category 1 – PROFESSIONAL ATTENDANCES

AN.0.51

Case Conferences by Consultant Physician - (Items 820 to 838, 6029 to 6034 and 6064 to 6075)

Items 820, 822, 823, 825, 826, 828, 6029, 6031, 6032, 6034, 6064, 6065, 6067, 6068, 6035, 6037, 6038, 6042, 6071, 6072, 6074 and 6075 apply to a community case conference (including a case conference conducted in a residential aged care facility) organised to discuss one patient in detail and applies only to a service in relation to a patient who suffers from at least one medical condition that has been (or is likely to be) present for at least 6 months, or that is terminal, and has complex needs requiring care from a multidisciplinary team. Community case conference items ie 820, 822, 823, 825, 826 and 828 do not apply to an in-patient of a hospital.

For items 830, 832, 834, 835, 837 and 838, a discharge case conference is a case conference carried out in relation to a patient before the patient is discharged from a hospital. Items 830, 832, 834, 835, 837 and 838 are payable not more than once for each hospital admission.

The purpose of a case conference is to establish and coordinate the management of the care needs of the patient.

A case conference is a process by which a multidisciplinary team carries out the following activities:

- discusses a patient's history;
- identifies the patient's multidisciplinary care needs;
- identifies outcomes to be achieved by members of the case conference team giving care and service to the patient;
- identifies tasks that need to be undertaken to achieve these outcomes, and allocating those tasks to members of the case conference team; and
- assesses whether previously identified outcomes (if any) have been achieved.

For the purposes of items 820, 822, 823, 830, 832, 834, 6029, 6031, 6032, 6034, 6064, 6065, 6067 and 6068 (that is, where a consultant physician organises a case conference) a multidisciplinary team requires the involvement of a minimum of four formal care providers from different disciplines. The consultant physician is counted toward the minimum of four. Although they may attend the case conference, neither the patient nor their informal carer can be counted toward the minimum of four. One member may be another medical practitioner.

For the purposes of items 825, 826, 828, 835, 837, 838, 6035, 6037, 6038, 6042, 6071, 6072, 6074 and 6075 (that is, where a consultant physician participates in a case conference) a multidisciplinary team requires the involvement of a minimum of three formal care providers from different disciplines. The consultant physician is counted toward the minimum of three. Although they may attend the case conference, neither the patient nor their informal carer can be counted toward the minimum of three. One member may be another medical practitioner.

In addition to the consultant physician and one other medical practitioner, "formal care providers" include:

- allied health professionals, being: registered nurse, physiotherapist, occupational therapist, podiatrist, speech pathologist, pharmacist; dietician; psychologist; orthoptist; orthotist and prosthetist, optometrist; audiologist, social worker, Aboriginal and Torres Strait Islander health practitioner, Aboriginal health worker, mental health worker, asthma educator, diabetes educator, dental therapist, dentist; and
- community service providers being: personal care worker, home and community care service provider, meals on wheels provider, education provider and probation officer.

Organisation of a case conference

For items 820, 822, 823, 830, 832, 834, 6029, 6031, 6032, 6034, 6064, 6065, 6067 and 6068, organise and coordinate a community case conference means undertaking the following activities in relation to a case conference:

- (a) explaining to the patient or the patient's agent the nature of a case conference, and asking the patient or the patient's agent whether they agree to the case conference taking place; and
- (b) recording the patient's or agent's agreement to the case conference; and
- (c) recording the day on which the conference was held, and the times at which the conference started and ended; and
- (d) recording the names of the participants; and
- (e) putting a copy of that record in the patient's medical records; and
- (f) giving the patient or the patient's agent, and each other member of the team a summary of the conference; and
- (h) giving a copy of the summary of the conference to the patient's usual general practitioner; and
- (i) discussing the outcomes of the patient or the patient's agent.

Organisation of a discharge case conference (items 830, 832 and 834), may be provided for private in-patients only, and must be organised by the medical practitioner who is providing in-patient care.

Participation in a case conference

For items 825, 826, 828, 835, 837, 838, 6035, 6037, 6038, 6042, 6071, 6072, 6074, 6075. participation in a case conference must be at the request of the person who organises and coordinates the case conference and includes undertaking the following activities when participating in a case conference:

- (a) recording the day on which the conference was held, and the times at which the conference started and ended; and
- (b) recording the matters mentioned in Organisation of a case conference in so far as they relate to the medical practitioner's participation in the case conference, and putting a copy of that record in the patient's medical records.

General requirements

The case conference must be arranged in advance, within a time frame that allows for all the participants to attend. The minimum of three care providers for participating in a case conference or four care providers for organising a case conference must be present for the whole of the case conference. All participants must be in communication with each other throughout the conference, either face to face, by telephone or by video link, or a combination of these.

A record of the case conference which contains: a list of the participants; the times the conference commenced and concluded; a description of the problems, goals and strategies; and a summary of the outcomes must be kept in the patient's record. The notes and summary of outcomes must be provided to all participants and to the patient's usual general practitioner.

Prior informed consent must be obtained from the patient, or the patient's agent. In obtaining informed consent the consultant physician should:

- Inform the patient that their medical history, diagnosis and care preferences will be discussed with other case conference participants;
- Provide an opportunity for the patient to specify what medical and personal information they want to be conveyed to, or withheld from, the other care providers;
- Inform the patient that they will incur a charge for the service for which a Medicare rebate will be payable.

Medicare benefits are only payable in respect of the service provided by the coordinating consultant physician or the participating consultant physician. Benefits are not payable for another medical practitioner organising a case conference or for participation by other medical practitioners at a case conference, except where a medical practitioner organises or participates in a case conference in accordance with items 735 to 758 (GPs), and items 235 to 244 (non-specialist practitioners).

The benefit is not claimable (and an account should not be rendered) until all components of these items have been provided. See General Explanatory Notes for further details on billing procedures.

It is expected that a patient would not normally require more than 5 case conferences in a 12 month period.

This item does not preclude the claiming of a consultation on the same day if other clinically relevant services are provided.





Kirontech