

Reprised 2021 with matched data from Discovery Health, South Africa (Private Health Insurer)

Summary report

The Prostheses List: Is it cost effective and what recommendations could improve its quality as a tool for reimbursement?

Private Healthcare Australia

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Overview

Evaluate published a prior version of this report in March 2020, comparing global device prices of 4 developed health markets: The Prostheses List (PL) from Australia; UK's NHS, PHARMAC in New Zealand; and France's list of Products and Services Refundable; for identical manufacturers' devices. This document was referenced in both recent Department of Health consultations¹ and a subsequent paper on device reform issued by Private Healthcare Australia² in December 2020. This current revised version extends the analysis by including data from Discovery Health, a private health insurance (PHI) fund based in South Africa.

The original paper and this revised version were both produced with the goal of addressing two questions previously not answered. The first of these is specifically what price discrepancy exists between markets with respect to identical product codes? Prior to the original report, there was conjecture and claims from payers and suppliers alike regarding the magnitude of these differences. Secondly and perhaps more critically, the question is asked as to the consistency of this difference between devices and clinical groups for similarly imported devices. A lack of consistent price variation compared to other world markets would point to market failure of the PL mechanism (i.e. failure to reflect global competition), and not unique Australian market factors, including tax, geography, regulatory, reimbursement or others claimed by suppliers, be they direct representatives of global multinationals or on-seller distributors.

Since the publication of the March 2020 report there has been a substantial decrease in the French reimbursement for cardiac stents from the prior levels of €840.00 and €760.00 to a flat €630.00 applied to all major suppliers. In addition in our earlier report Medacta one of the larger orthopaedic suppliers in Australia was not listed in New Zealand. That company is now reported on NZ (Pharmac) through an on seller Pioneer Med.³ These two changes are marked with a font colour change.

¹ Options for a revised framework for setting and reviewing benefits for the Prostheses List. Department of Health Version 7.0, December 2020.

² "Surgically replacing the list. A roadmap for prostheses list reform." Private Healthcare Australia, December 2020.

³ <https://pioneermed.co.nz/therapeutic-area/joints/>.



Results

Within the basket containing the 283 largest items by value on the PL, all procedural Clinical Advisory Groups (CAG) are represented at some level. The largest representations are consistent with the largest CAG categories and combined represent 62.3% coverage of the PL from these 283 codes. Discovery Health provides matched detail on ophthalmic devices, something not available from the other health systems. No comparators have been found for the 3 billing codes originating in Plastic and Reconstructive.

Table 1: Representation of matched product codes across CAG's by country data sets

Clinical Advisory group	283 PL items	5 Markets	PL/UK	PL/NZ	PL/SA
01 - Ophthalmics	16	-	-	-	16
02 – Ear, Nose & throat	6	-	6	-	6
03 - General/ Miscellaneous	36	-	20	2	22
04 - Neurosurgical	11	-	11	-	9
05 - Urogenital	6	-	3	-	4
06 - Specialty Orthopaedics	27	1	20	14	10
07 - Plastic & Reconstructive	3	-	-	-	-
08 - Cardiac	54	6	47	7	41
09 - Cardiothoracic	4	-	4	-	4
10 - Vascular	9	-	8	3	6
11 - Hip	40	22	38	23	38
12 - Knee	52	34	45	41	46
13 - Spinal	19	1	14	9	11
TOTAL	283	64	216	99	213

Table 2: Cost differential of matched product codes across country data sets

64 of 283 Billing Codes were matched on all 4 datasets, representing 17% of all PL 2017/18 value				
PL value	UK Value*	NZ Value*	French Value*	SA Value*
\$272,807,265	\$193,105,348	\$180,272,981	\$129,524,630	\$181,457,293
PL Premium	41.3%	51.3%	110.6%	50.3%

*Exchange rate used £1: A\$1.82, NZ\$1: A\$94c, € 1:A\$1.58, R1:A\$0.099

Table 3: Comparison between PL and NHS on 216 of 283 billing codes (49% of total PL value)

216 of 283 Billing Codes were matched on the UK NHS website 49% of all PL 2017/18 value	
PL value	UK Value*
\$805,930,431	\$664,881,926
PL Premium to NHS (UK)	21.2%



Table 4: Comparison between PL and Pharmac on 99 of 283 billing codes (22% of total PL value)

99 of 283 Billing Codes were matched on the NZ Pharmac excel 22% of all PL 2017/18 value	
PL value	NZ Value*
\$364,221,112	\$266,358,269
PL Premium to Pharmac (NZ)	36.7%

*Exchange rate used NZ\$1: A\$94c

Table 5: Comparison between PL and Discovery on 213 of 283 billing codes (49% of total PL value)

213 of 283 Billing Codes were matched With Discovery Health 49% of all PL 2017/18 value	
PL value	SA Value*
\$805,494,558	\$581,827,836
PL Premium to Discovery (SA)	38.4%

*Exchange rate used R1: A\$0.099

Table 6: All 4 major drug eluting stents were represented in the 5 markets

Billing Code	CAG	Supplier	Item	\$A PL	£ NHS	\$ NZ	€ France	R SA
MI289	Cardiac	Medtronic	Resolute Onyx	\$2,484.00	£435.46	\$950.00	€630.00	R14,520
					\$823.02	\$893.00	\$1,026.90	\$1,098.44
AY044	Cardiac	Abbott	Xience Alpine	\$2,484.00	£426.80	\$750.00	€630.00	R14,520
					\$806.65	\$705.00	\$1,026.90	\$1,098.44
BS272	Cardiac	Boston	Synergy	\$2,484.00	£705.16	\$1,600.00	€630.00	R17,660.90
					\$1,332.75	\$1,504.00	\$1,026.90	\$1,336.90
BT178	Cardiac	Biotronik	Orsiro	\$2,484.00	£330.00	\$1,050.00	€630.00	R15,302.94
					\$623.70	\$987.00	\$1,026.90	\$1,157.67

Evaluate also included detail in the March 2020 report on the then 4 leading cementless stems as reported on the AOA NJRR (table 7) and subsequently reflected in utilisation on HCP1 data. Notably in a market 1/5 the size of Australia and with significantly lower prices there are no less than 10 orthopaedic suppliers (including all the major 5 suppliers), which is, per capita, more than is present in the Australian market. These 10 companies support around 200-250 Surgeons actively performing hip replacement surgery.



Table 7: All 4 major cementless stems represented across all 5 markets

Billing Code	CAG	Supplier	Item	\$A PL	£ NHS	\$ NZ	€ France	R SA
DP943	Hips	J&J	Corail	\$3,779.00	£1,345.80	\$2,312.50	€ 808.42	R32,937.25
					\$2,519.93	\$2,173.75	\$1,293.47	\$2,771.67
MU003	Hips	Medacta	Quadra H	\$3,779.00	£772.50	\$2,400.00	€ 808.42	R20,692.25
					\$1,436.85	\$2,256.00	\$1,293.47	\$1,741.25
SM122	Hips	S&N	Polarstem	\$4,394.00	£1,018.32	\$2,000.00	€ 808.42	R25,278.15
					\$1,894.08	\$1,880.00	\$1,293.47	\$2,127.16
HW529	Hips	Stryker	Accolade II	\$4,394.00	£1,572.48	\$2,500.00	€ 808.42	R37,641.32
					\$2,924.81	\$2,350.00	\$1,293.47	\$3,167.52

Consistency of cost between suppliers and CAG groups

While focus has been on the general comparison of pricing at a macro level between health systems, variances at a group and product level are equally significant to policy consideration.

Device suppliers have contended for many years that the Australian private system generates unique cost impositions that justify a premium over comparable markets. Should this claim be true, it would be reasonable to see prices for imported devices be consistent in their gap within surgical specialties. Evaluate’s review on the largest 283 codes, however, shows no statistical evidence to support this. In fact, a number of products are shown to be 2-5 times the prices they are in other markets, while others are consistent with universal or largely standardised international prices. This directly relates to the level of global competition that has developed over the last 25 years impacting price, in particular in joint replacement and cardiac procedures.

A revelation in the production of this report was the strong alignment of pricing between globally disparate systems in both geography and public vs private sectors as experienced in South Africa, UK, NZ and France. There were generally low levels of alignment seen between the Australian PL and these 4 markets, particularly in surgical disciplines that have seen the strongest levels of worldwide competition over the last two decades.

Evaluate advocates the use of evidence-based benchmarking to set pricing, whether this be under a DRG or through retention of a formal list. What is in evidence is that a combination of: a jump off point for group pricing for mature technologies like joint replacements; a lack of competitive tension; and a lack of comparative data on new *non-prostheses* has seen a de-coupling of Australian prices from less regulated and price-competitive foreign markets. This applies to the public system as well as the private sector, for the reasons outlined (i.e. that companies with the bulk of their revenue being generated from the private system are incentivized to protect PL pricing over a competitive tendered public offering).



Table 8: Pricing inconsistency on global devices suggests PL market failure not unique local costs

Billing Code	CAG	Supplier	Item	\$A PL	£ NHS	\$NZ	€ France / \$US	R South Africa
CO074	ENT	Cochlear	Nucleus® CI522	\$12,891.00	£8,103.60 \$14,748.55	N/A	€ 14,750.00 \$23,305.00	R97,321.46 \$8,189.60
MI259	Cardiac	Medtronic	Evolut™R TAVI	\$22,932.00	£16,272.00 \$29,615.04	N/A	€ 16,230.75 \$25,644.59	R185,149.18 \$15,580.30
SJ374	Neuro	Abbott	Prodigy IPG	\$24,700.00	£13,500.00 \$24,750.00	N/A	€ 16,510.21 \$26,086.13	R251,461.83 \$21,160.51
AS246	Gen/ Misc	Medtronic	Absorbatack	\$509.00	£300.00 \$546.00	N/A	US\$279.00 \$390.60	R4,243.80 \$357.12
MC755	Urogenital	Medtronic	Interstim II	\$9,072.00	£7,344.00 \$13,366.08	N/A	€ 5,385.00 \$8,508.30	R66,423.92 \$5,589.57
BT193	Cardiac	Biotronik	Edora 8 DR-T	\$8,482.00	N/A	N/A	€2,947.63 \$4,657.26	R42,200.52 \$3,551.17
MC933	Cardiac	Medtronic	Advisa DR MRI	\$8,482.00	£2,676.00 \$4,870.32	N/A	N/A	R77,198.84 \$6,496.28
SN857	Knee	S&N	Genesis II Tibial	\$1,923.00	£500.94 \$911.71	\$1,665.00 \$1,565.10	€728.96 \$1,151.76	R9,823.88 \$826.68
DY464	Hip	J&J	Delta Ceramic	\$2,022.00	£916.80 \$1,688.58	\$1,350.00 \$1,269.00	€334.83 \$529.03	R13,241.99 \$1,114.31
AY044	Cardiac	Abbott	Xience Alpine	\$2,484.00	£426.80 \$806.65	\$750.00 \$705.00	€630.00 \$1,026.90	R14,520.00 \$1,098.44

With the basket of 283 devices strongly replicated in both the UK and in South Africa – where it represents around 50% of the total PL expenditure – there is a direct opportunity to compare at a clinical group or CAG level the differences from the PL in a statistically relevant way. This is a strong comparison in particular for hip replacements and for cardiac devices, which present as the outlier groups most in need of pricing reform.

While spine is often identified as an area of high cost, attendant data is limited due to a small base of codes. Whereas hip and knee replacements have a standard four components regardless of where in the world the surgery is performed, spine does permit different approaches and use of devices. As a result, even if prices were considered comparable at a manufacture or SKU level, the amount used per patient depending upon surgical approach can vary dramatically based on approach, hospital and funding environment.

Finally, this report has picked the remaining 52 codes from: ENT; General & Miscellaneous, Neurosurgical; Urogenital; SOGAG; Cardio-Thoracic; and Vascular and grouped them together. While there can be wide variations within these groups including many sealants and glues, as a collected proxy for the remainder of



the PL this shows substantively lower variation between the UK and South African markets and the Australian private market.

Table 9-13: Pricing inconsistency by CAG groups: PL vs NHS (UK) vs Discovery (SA)

CARDIAC – 36 codes		
Prostheses List \$	UK NHS A\$	Discovery SA A\$
\$192,004,950	\$131,122,881	\$113,787,413
PL Premium %	46.4%	68.7%

HIP – 38 codes		
Prostheses List \$	UK NHS A\$	Discovery SA A\$
\$129,776,744	\$86,904,573	\$76,467,671
PL Premium %	49.3%	69.7%

KNEES – 42 codes		
Prostheses List \$	UK NHS A\$	Discovery SA A\$
\$141,253,325	\$125,921,066	\$114,268,064
PL Premium %	12.2%	23.6%

SPINE – 10 codes		
Prostheses List \$	UK NHS A\$	Discovery SA A\$
\$20,432,234	\$20,549,804	\$10,449,064
PL Premium %	-0.1%	95.5%

OTHER PL GROUPS – 52 codes		
Prostheses List \$	UK NHS A\$	Discovery SA A\$
\$191,646,944	\$178,117,738	\$175,464,300
PL Premium %	7.6%	9.2%