



## **Supporting Information**

### **Supplementary methods and results**

This appendix was part of the submitted manuscript and has been peer reviewed.  
It is posted as supplied by the authors.

Appendix to: Olsen CM, Pandeya N, Neale RE, Whiteman DC. Age group-specific changes in keratinocyte cancer treatment rates in Australia, 2012– 2021: a retrospective cohort study based on MBS claims data. *Med J Aust* 2024; doi: 10.5694/mja2.52293.

**Table 1.** MBS item numbers for the diagnosis and treatment of skin cancers and benign skin lesions 2011-2015.

	<b>Procedure</b>	<b>Item Numbers</b>	<b>Description</b>
SURGICAL EXCISION	Benign lesions to exclude melanoma	31205	single lesion; ≤ 10 mm in diameter
		31210	single lesion; > 10 mm and ≤ 20 mm in diameter
		31215	single lesion; > 20 mm in diameter
		31220	4-10 lesions; ≤ 10 mm in diameter
		31225	>10 lesions; ≤ 10 mm in diameter
		31230	nose, eyelid, lip, ear, digit or genitalia
		31235	face, neck or lower leg; ≤ 10 mm in diameter
		31240	face, neck or lower leg; ≤ 10 mm in diameter
	Squamous cell/basal cell carcinoma, first surgical excision	31255	nose, eyelid, lip, ear, digit or genitalia; ≤ 10 mm in diameter
		31260	nose, eyelid, lip, ear, digit or genitalia; > 10 mm in diameter
		31265	face, neck or lower leg; ≤ 10 mm in diameter
		31270	face, neck or lower leg; > 10 mm and ≤ 20 mm in diameter
		31275	face, neck or lower leg; > 20 mm in diameter
		31280	other areas of the body; ≤ 10 mm in diameter
		31285	other areas of the body; > 10 mm and ≤ 20 mm in diameter
		31290	other areas of the body; > 20 mm in diameter
	Mohs surgery	31000, 31001, 31002	
BIOPSY	Biopsy	30071	
OTHER TREATMENT (cryotherapy or serial curettage)	Premalignant lesion	30192	
	Malignant lesion	30196, 30197, 30202, 30203, 30205	

**Table 2.** MBS item numbers for the diagnosis and treatment of skin cancers and benign skin lesions 2016.

	<b>Procedure</b>	<b>Item Numbers</b>	<b>Description</b>	
SURGICAL EXCISION	Benign lesions to exclude melanoma	31357	nose, eyelid, lip, ear, digit or genitalia; <6 mm in diameter	
		31360	nose, eyelid, lip, ear, digit or genitalia; ≥6 mm in diameter	
		31362	face, neck, scalp, nipple-areola complex, distal lower limb (distal to, and including, the knee) or distal upper limb (distal to, and including, the ulnar styloid); <14 mm in diameter	
		31364	face, neck, scalp, nipple-areola complex, distal lower limb (distal to, and including, the knee) or distal upper limb (distal to, and including, the ulnar styloid); <14 mm in diameter	
		31366	other areas of the body; <15mm	
		31368	other areas of the body; 15-30 mm	
		31370	other areas of the body; >30 mm in diameter	
	Squamous cell/basal cell carcinoma, first surgical excision	31356	nose, eyelid, lip, ear, digit or genitalia; <6 mm in diameter	
		31358	nose, eyelid, lip, ear, digit or genitalia; ≥6 mm in diameter	
		31359	nose, eyelid, lip, ear, digit or genitalia; excision area at least one third of surface area of the site	
		31361	face, neck, scalp, nipple-areola complex, distal lower limb (distal to, and including, the knee) or distal upper limb (distal to, and including, the ulnar styloid); <14 mm in diameter	
		31363	face, neck, scalp, nipple-areola complex, distal lower limb (distal to, and including, the knee) or distal upper limb (distal to, and including, the ulnar styloid); <14 mm in diameter	
		31365	other areas of the body; <15mm	
		31367	other areas of the body; 15-30 mm	
		31369	other areas of the body; >30 mm in diameter	
		Mohs surgery	31000, 31001, 31002	
	BIOPSY	Biopsy	30071	
OTHER TREATMENT (cryotherapy or serial curettage)	Premalignant lesion	30192		
	Malignant lesion	30196, 30202		

**Table 3. Number of MBS claims for skin cancer-related treatments, Australia, 2012 calendar year, by age and sex.**

Sex/and age group	Biopsy	BCC/SCC excisions	Mohs surgery	Excision of benign lesions (to exclude melanoma)	Cryotherapy/ curettage: premalignant lesions	Cryotherapy/ curettage: malignant lesions
	Counts	Counts	Counts	Counts	Counts	Counts
<b>Male patients</b>	411,270	366,928	5,943	275,628	399,835	132,080
<b>0-5</b>	192	8	0	446	118	4
<b>5-14</b>	1,952	68	0	4,706	2,435	97
<b>15-24</b>	7,217	338	7	17,670	2,218	186
<b>25-34</b>	14,787	2,697	60	27,496	3,076	733
<b>35-44</b>	31,854	13,852	267	37,883	12,616	4,080
<b>45-54</b>	59,065	38,363	777	47,995	38,889	11,961
<b>55-64</b>	95,292	79,239	1,367	56,860	87,614	26,994
<b>65-74</b>	109,982	110,751	1,765	50,171	130,784	41,196
<b>75-84</b>	75,821	97,915	1,434	27,361	101,261	37,788
<b>85+</b>	15,108	23,697	266	5,040	20,824	9,041
<b>Female patients</b>	400,629	223,378	4,669	285,473	243,787	79,794
<b>0-5</b>	154	2	0	372	120	6
<b>5-14</b>	1,859	74	1	4,496	2,361	99
<b>15-24</b>	9,067	332	6	19,509	1,693	168
<b>25-34</b>	20,773	2,552	100	35,115	2,200	586
<b>35-44</b>	41,055	10,636	349	48,255	7,651	2,811
<b>45-54</b>	68,133	26,798	775	55,774	23,960	8,132
<b>55-64</b>	91,324	45,313	1,200	53,751	51,421	15,480
<b>65-74</b>	90,271	59,437	1,109	40,562	75,481	22,405
<b>75-84</b>	59,281	54,053	831	21,439	59,881	21,386
<b>85+</b>	18,712	24,181	298	6,200	19,019	8,721

BCC = basal cell carcinoma; SCC = squamous cell carcinoma; MBS = Medical Benefits Schedule.

**Table 4. MBS-subsidised skin cancer-related services: average annual percentage changes in age-standardised rates of squamous cell/basal cell carcinoma excision, cryotherapy/curettage of malignant lesions, and diagnostic biopsy, 2012–2021, by age group and sex**

Age group (years)	Average annual percentage change (95% confidence interval)					
	Basal cell carcinoma/squamous cell carcinoma excisions		Cryotherapy/curettage		Biopsy	
	Men	Women	Men	Women	Men	Women
0–34	–3.4% (–4.7 to –2.1%)	–2.3% (–4.0 to –0.5%)	–6.0% (–9.4 to –2.5%)	–5.7% (–8.5 to –2.8%)	2.8% (1.9 to 3.7%)	3.0% (2.1 to 3.9%)
35–44	–3.0% (–3.7 to –2.3%)	–1.7% (–2.4 to –1.0%)	–4.4% (–5.7 to –3.1%)	–4.9% (–7.0 to –2.7%)	3.3% (2.4 to 4.2%)	3.3% (2.7 to 4.0%)
45–54	–1.0% (–1.5 to –0.6%)	–0.4% (–1.0 to 0.2%)	–1.6% (–2.9 to –0.2%)	–1.9% (–3.1 to –0.7%)	4.5% (3.6 to 5.3%)	3.9% (3.3 to 4.5%)
55–64	–0.4% (–1.1 to 0.3%)	0.6% (–0.1 to 1.3%)	–1.3% (–2.7 to 0.2%)	–0.4% (–1.4 to 0.6%)	4.2% (3.3 to 5.1%)	3.9% (3.2 to 4.7%)
65–74	1.0% (0.1 to 1.8%)	0.9% (0.0 to 1.7%)	0.2% (–1.4 to 1.8%)	–0.1% (–1.9 to 1.6%)	5.1% (4.0 to 6.1%)	4.3% (3.3 to 5.4%)
75 or older	2.8% (1.4–4.1%)	2.9% (1.6 to 4.1%)	1.9% (0.1 to 3.7%)	1.6% (–0.2 to 3.5%)	6.9% (5.5 to 8.4%)	6.9% (5.8 to 8.1%)