

CDBS Data Analysis

SQ&PI

16 January 2024



Government of South Australia

Method

SA Dental requested from Services Australia data pertaining to Child Dental Benefits Schedule (CDBS) utilisation for South Australian children. The intent of the data request was to identify cohorts (by locality and/or other sociodemographic indicators) of eligible children and utilisation of CDBS among those cohorts to inform a campaign to increase utilisation among South Australian children. The data request covered the 2020 and 2021 calendar years, and included:

- Age of eligible child
- Location (at Statistical area 2, SA2, level)
- Aboriginality status
- Percentage of eligible children who claimed CDBS benefits
- Claim provider (public or private)

Once received, this data was triangulated with publicly available additional data sources including:

- Census population data (sourced from Australian Bureau of Statistics)
- Workforce distribution data (2021 dental practitioner data, sourced from Public Health Information Development Unit using National Health Workforce Dataset)

Analyses were typically completed in Tableau and included mapping of a number of data elements for visual analysis.

For some data elements, numbers were less than 10 and were therefore withheld by the Commonwealth. Within the data analysis, the number for known data elements was subtracted from the total, and the remainder was divided among those elements with missing data. *This produces a figure less than 10, which is inaccurate as an actual number and should be used as representative only.* The use of this representative number was required for mapping purposes to manage otherwise missing data.

Services Australia confirmed permission to share this report on 16/01/2024 (Ref. RMS3383 Request for publication release - SA Dental CDBS data)

Results

Eligibility and Utilisation Overview

A summary of the overall analyses are presented in the Figure below. Of interest is the decrease in eligible children from 2020 to 2021. Census data are from 2021 only and estimated resident population (ERP) from 2020 was not included, however it is reasonable to conclude that within an increasing population and decrease in the number of eligible children, the percentage of eligible children would have also decreased. This is consistent with the *Report on the Fifth Review of the Dental Benefits Act 2008* which identified "the number of eligible children has been decreasing over time, likely due to changes in means testing arrangements linked to Australian Government payments". The fifth review notes 52.2% of South Australian children were eligible for CDBS in 2021, while the fourth review identified 66% as being eligible, a significant decrease over the four year period (differences between the fifth review figure and those presented below are likely due to changes in

population mapping to SA2 levels accounting for the "null" population identified from census data).

The figure below identifies there was an increase in claims between 2020 and 2021, with 44.4% of eligible children claiming in 2021. This increase is not surprising given the reductions in activity observed throughout 2020 and largely attributed to COVID-19. The fifth review identified CDBS utilisation had peaked at 46.3% in SA in 2019. The ongoing post-COVID-19 impacts on CDBS utilisation are planned with a further data request for 2022 and 2023 data to identify if utilisation has returned to prior levels.

The public: private percentage split of claims in South Australia is approximately 45:55 and this has remained fairly steady. Since inception, the public: private split is defined as 57:43, with previous reviews identifying the public sector in South Australia was a strong early adopter of CDBS, while the private sector utilisation has increased significantly as familiarity with the system and confidence in the program's longevity has increased.

While overall utilisation in SA is above 40%, and has consistently been among the best performing states, utilisation among Aboriginal and Torres Strait Islander children is substantially lower at 35%. This is consistent with national utilisation rates.

Figure 1: 2020 vs 2021 comparison of key metrics

YoY Comparision



Eligibility and Utilisation by place of residence

Mapping of the number of children per SA2 and CDBS eligibility demonstrated high numbers of children in northern, southern and north-western suburbs of metropolitan

Adelaide, which corresponded with high levels of eligibility. In the Adelaide Hills including Mt Barker region, there were also high levels of children, however eligibility varied.

In regional SA, Mt Gambier had the highest concentration of children outside Adelaide, and also very high eligibility (85%). While population numbers were typically concentrated in regional centres, the highest eligibility rates were observed in the Riverland. Of note is that there were 647 children identified in APY Lands in Census 2021, but the CDBS eligibility was recorded as 0%. This is perhaps a reflection of the more complex family arrangements sometimes evident in these locations.

With regards to utilisation, while in metropolitan Adelaide the spread of uptake was relatively clustered around the metropolitan median of 44.1%, at an SA2 level the utilisation ranged from 35% to 54%. Lower utilisation was observed in areas of greater disadvantage, as measured by SEIFA index. It is important to note though that utilisation in the metropolitan area did not exceed 54% in any local area, suggesting a significant number of CDBS eligible children are not utilising their benefits, irrespective of location.

In regional South Australia, utilisation was more varied around the median of 46.2%, with a slightly expanded tail. Utilisation ranged from 18% in Outback, to a high of 59% in Kangaroo Island.

Child population, CDBS eligibility, CDBS utilisation by SA2 and SEIFA is presented in Table 1 below.

Note there are some areas missing census data, some where the number of eligible children exceed census data, and one area where claims exceed eligible children. This is thought to be due to several factors including census boundary

changes/mapping methods, transient population versus census, and eligibility registration issues in remote areas.

Table 1: SEIFA score, population, eligible population (and %) and number (and %) of claims per SA2

C_SA2	C_CTSEIFA	Census Data	Eligible Children Aged 1 to 17 Total	CDBS Eligible vs Census Total %	Claims Children Aged 1 to 17 Total	Total Claim %
Aberfoyle Park	SEIFA_4	2,376	1,110	46.7%	489	44.1%
Adelaide	SEIFA_4	1,042	684	65.6%	282	41.2%
Adelaide Hills	SEIFA_4	1,357	712	52.5%	278	39.0%
Aldgate - Stirling	SEIFA_5	4,167	1,150	27.6%	541	47.0%
Aldinga	SEIFA_2	3,641	2,485	68.3%	1,213	48.8%
APY Lands	SEIFA_1	647	0	0.0%	15	
Athelstone	SEIFA_4	1,804	682	37.8%	315	46.2%
Barmera	SEIFA_1	1,192	829	69.5%	416	50.2%
Barossa - Angaston	SEIFA_3	1,377	603	43.8%	270	44.8%
Belair	SEIFA_5	928	200	21.6%	93	46.5%
Bellevue Heights	SEIFA_4	1,221	401	32.8%	197	49.1%
Berri	SEIFA_1	777	764	98.3%	355	46.5%
Beverley	SEIFA_2	1,656	1,017	61.4%	467	45.9%
Blackwood	SEIFA_5	2,860	702	24.5%	325	46.3%
Brighton (SA)	SEIFA_4	2,633	777	29.5%	324	41.7%
Burnside - Wattle Par	SEIFA_5	3,821	846	22.1%	403	47.6%
Ceduna	SEIFA_2	599	405	67.6%	118	29.1%
Christie Downs	SEIFA_1	1,868	1,733	92.8%	737	42.5%
Christies Beach	SEIFA_1	1,936	1,474	76.1%	584	39.6%
Clare	SEIFA_3	807	548	67.9%	287	52.4%



Clarendon	SEIFA_4	527	141	26.8%	61	43.3%
Colonel Light Gardens	SEIFA_4	3,362	856	25.5%	369	43.1%
Coober Pedy	SEIFA_1	222	257	115.8%	77	30.0%
Coromandel Valley	SEIFA_5	1,077	333	30.9%	166	49.8%
Craigmore - Blakeview	SEIFA_2	5,000	3,519	70.4%	1,369	38.9%
Davoren Park	SEIFA_1	5,283	4,771	90.3%	1,839	38.5%
Edwardstown	SEIFA_2	2,417	1,197	49.5%	567	47.4%
Elizabeth	SEIFA_1	2,490	2,791	112.1%	1,225	43.9%
Elizabeth East	SEIFA_1	3.225	2,709	84.0%	1,133	41.8%
Enfield - Blair Athol	SEIFA 1	5.018	3.452	68.8%	1.666	48.3%
Eyre Peninsula	SEIFA 2	1.386	872	62.9%	413	47.4%
Flagstaff Hill	SEIFA 4	2,161	757	35.0%	341	45.0%
Flinders Park	SEIFA 2	2.902	1.373	47.3%	607	44.2%
Fulham	SEIFA 3	584	194	33.2%	81	41.8%
Gawler - North	SEIFA 3	2 270	1 223	53.9%	566	46.3%
Gawler - South	SEIFA 2	4 212	2 863	68.0%	1 201	41 9%
Gilbert Valley	SEIFA 3	943	524	55.6%	255	48.7%
Glenela (SA)	SEIFA 4	2 842	027	32.8%	422	45.2%
Glenside - Beaumont	SEIFA 5	2,042	523	21.7%	23/	40.276
Golden Grove	SEIFA 4	2,410	790	38.6%	276	3/ 9%
Goodwood - Millswood	SEIFA 5	2,040	790	25.4%	320	40.1%
Goolwa - Port Elliot	SEIFA 2	1 575	1 169	7/ 2%	619	53.0%
Govder	SEIFA 2	740	529	74.278	247	46.8%
Grant	SEIFA 2	1 1 6 5	520	F6 5%	247	40.0 %
Greenwith	SEIFA 3	1,105	991	30.3 %	330	36.8%
Hackham -	SEIFA 2	1,995	001	44.2 /0	524	30.0 //
Onkaparinga		1,355	847	62.5%	370	43.7%
Hackham West - Huntfi	SEIFA_1	1,642	1,438	87.6%	621	43.2%
Hahndorf - Echunga	SEIFA_4	878	276	31.4%	145	52.5%
Hallett Cove	SEIFA_4	2,378	1,091	45.9%	450	41.2%
Happy Valley	SEIFA_3	2,698	1,327	49.2%	577	43.5%
Henley Beach	SEIFA_4	2,885	929	32.2%	416	44.8%
Highbury - Dernancourt	SEIFA_4	2,192	803	36.6%	345	43.0%
Hindmarsh - Brompton	SEIFA_3	2,883	1,570	54.5%	682	43.4%
Hope Valley - Modbury	SEIFA_2	2.983	1.876	62.9%	881	47.0%
Ingle Farm	SEIFA_1	3.081	2.015	65.4%	886	44.0%
Jamestown	SEIFA 2	915	515	56.3%	255	49.5%
Kadina	SEIFA_1	1.078	747	69.3%	327	43.8%
Kangaroo Island	SEIFA 2	852	530	62.2%	315	59.4%
Karoonda - Lameroo	SEIFA 2	560	347	62.0%	155	44.7%
Kimba - Cleve - Frank	SEIFA 3	861	485	56.3%	196	40.4%
Kingston - Robe	SEIFA 2	610	461	75.6%	234	50.8%
Largs Bay - Semaphore	SEIFA 3	2 372	1 102	46.5%	486	44 1%
Le Hunte - Elliston	SEIFA 2	489	318	65.0%	134	42.1%
Lewiston - Two Wells	SEIFA 2	1 452	752	51.8%	315	41.9%
Light	SEIFA 2	2 241	1 048	46.8%	458	43.7%
Lobethal - Woodside	SEIFA 3	1 906	1,010	56.1%	476	44.5%
Locklevs	SEIFA 3	2 289	876	38.3%	373	42.6%
Loxton	SEIFA 2	1 155	759	65.7%	397	52.3%
Loxton Region	SEIFA 2	312	22/	71 8%	118	52.0%
Lyndoch	SEIFA 3	1 450	550	37.7%	210	38.2%
Mallala	SEIFA 1	650	330	57 7%	12/	35 3%
Mannum	SEIFA 1	039	613	62 30/	300	50.3%
Marino - Seaview Down	SEIFA 4	1 086	728	36 7%	309	<u> </u>
Mawson Lakes - Globe	SEIFA 4	2 805	1 252	/A 70/	529	40.2 /0 /2 6%
McLaren Vale	SEIFA 4	1 1 1 1	1,555	40.7 /0 /6 10/	221	12.0 /0
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Millicent	SEIFA_1	961	648	67.4%	286	44.1%
Mitcham (SA)	SEIFA_5	3,418	723	21.2%	335	46.3%
Mitchell Park	SEIFA_2	2,714	1,531	56.4%	749	48.9%
Modbury Heights	SEIFA_3	3,934	1,924	48.9%	786	40.9%
Moonta	SEIFA_1	686	575	83.8%	189	32.9%
Morphett Vale - East	SEIFA_1	2,511	1,812	72.2%	755	41.7%
Morphett Vale - West	SEIFA_1	1,919	1,507	78.5%	714	47.4%
Morphettville	SEIFA_3	2,795	1,208	43.2%	512	42.4%
Mount Barker	SEIFA_3	4,989	2,475	49.6%	1,162	46.9%
Mount Barker Region	SEIFA_3	1,438	523	36.4%	249	47.6%
Mount Gambier - East	SEIFA_1	3,187	1,703	53.4%	809	47.5%
Mount Gambier - West	SEIFA_1	2,943	2,511	85.3%	1,138	45.3%
Munno Para West -	SEIFA_2	4 404	2 0 2 2	65.20/	1 202	44 10/
Ang		4,494	2,933	05.5%	1,293	44.170
Murray Bridge	SEIFA_1	3,525	3,017	85.6%	1,239	41.1%
Murray Bridge Region	SEIFA_2	740	454	61.4%	213	46.9%
Nailsworth - Broadview	SEIFA_4	1,279	394	30.8%	148	37.6%
Nairne	SEIFA_3	1,286	444	34.5%	225	50.7%
Naracoorte	SEIFA_1	1,278	857	67.1%	415	48.4%
Naracoorte Region	SEIFA_4	522	225	43.1%	115	51.1%
North Adelaide	SEIFA_5	552	179	32.4%	77	43.0%
North Haven	SEIFA_2	2,589	1,548	59.8%	667	43.1%
Northgate - Oakden -	SEIFA_3		3,172		1,505	47.4%
Norwood (SA)	SEIFA_4	1,644	463	28.2%	200	43.2%
Nuriootpa	SEIFA_2	1,346	874	64.9%	390	44.6%
One Tree Hill	SEIFA_4	491	143	29.1%	59	41.3%
Outback	SEIFA_1	271	187	69.0%	34	18.2%
Panorama	SEIFA_3	1,476	756	51.2%	396	52.4%
Para Hills	SEIFA_2	3,191	2,153	67.5%	977	45.4%
Paradise - Newton	SEIFA_2	3,728	1,844	49.5%	857	46.5%
Parafield Gardens	SEIFA_1	4,297	3,228	75.1%	1,453	45.0%
Paralowie	SEIFA_1	4,194	3,226	76.9%	1,423	44.1%
Payneham - Felixstow	SEIFA_3	2,202	854	38.8%	376	44.0%
Penola	SEIFA_2	607	317	52.2%	148	46.7%
Peterborough - Mount	SEIFA_1	864	656	75.9%	331	50.5%
Plympton	SEIFA_2	4,303	1,731	40.2%	771	44.5%
Pooraka - Cavan	SEIFA_1	1,664	1,274	76.6%	548	43.0%
Port Adelaide	SEIFA_1	1.932	1.326	68.6%	662	49.9%
Port Augusta	SEIFA 1	2.857	2.205	77.2%	882	40.0%
Port Lincoln	SEIFA 2	3.457	2.129	61.6%	820	38.5%
Port Pirie	SEIFA_1	2.756	2.177	79.0%	930	42.7%
Port Pirie Region	SEIFA 2	774	269	34.8%	120	44.6%
Prospect	SEIFA 4	3.068	1.085	35.4%	576	53.1%
Quorn - Lake Gilles	SEIFA 1	314	227	72.3%	127	55.9%
Redwood Park	SEIFA 3	3 379	1 540	45.6%	652	42.3%
Renmark	SEIFA 1	844	823	97.5%	405	49.2%
Renmark Region	SEIFA 2	1 011	336	33.2%	169	50.3%
Revnella	SEIFA 2	1 965	1 257	64.0%	559	44 5%
Richmond (SA)	SEIFA 3	2 514	1 203	۵۹.0% ۲۹%	538	44 7%
Rostrevor - Magill	SEIFA 3	4 67/	1 818	38 0%	825	45 0%
Roxby Downs	SEIFA 3	1 077	1,010	20.3 /0 28 /0/	000	-+J.3 /0 21 /0/
Roval Park - Hendon -	SEIFA 1	1 161	500 602	20.4 /0 50 60/	221	/7 80/
Salishury	SEIFA 1	3 074	2.526	0.0%	1 652	41.0%
Salishury Fast	SEIFA 2	3,971	3,000	67 50/	1,002	40.770
Salishury North		3,943	2,001	Q7.0%	1,210	40.0%
Seaford (SA)		4,301	3,09/	02.1%		42.3%
Sealulu (SA)	SEIFA_Z		3,355		1,457	43.4%

Seaton - Grange	SEIFA_2	2,896	1,523	52.6%	654	42.9%
Sheidow Park - Trott	SEIFA_4	2,389	1,076	45.0%	515	47.9%
Smithfield - Elizabet	SEIFA_1	2,916	3,291	112.9%	1,337	40.6%
St Agnes - Ridgehaven	SEIFA_3	2,384	1,232	51.7%	534	43.3%
St Peters - Marden	SEIFA_5	2,407	550	22.9%	236	42.9%
Strathalbyn	SEIFA_2	1,560	946	60.6%	462	48.8%
Strathalbyn Region	SEIFA_3	1,597	855	53.5%	415	48.5%
Tanunda	SEIFA_3	852	438	51.4%	199	45.4%
Tatiara	SEIFA_2	1,363	801	58.8%	445	55.6%
The Coorong	SEIFA_1	1,014	711	70.1%	299	42.1%
The Parks	SEIFA_1	3,692	2,684	72.7%	1,246	46.4%
Toorak Gardens	SEIFA_5	3,265	801	24.5%	412	51.4%
Unley - Parkside	SEIFA_5	3,877	965	24.9%	411	42.6%
Uraidla - Summertown	SEIFA_5	1,312	336	25.6%	183	54.5%
Victor Harbor	SEIFA_2	2,214	1,547	69.9%	866	56.0%
Virginia - Waterloo C	SEIFA_2	1,137	672	59.1%	288	42.9%
Waikerie	SEIFA_1	1,148	642	55.9%	343	53.4%
Wakefield - Barunga W	SEIFA_1	1,910	1,181	61.8%	546	46.2%
Walkerville	SEIFA_5	1,435	324	22.6%	119	36.7%
Wallaroo	SEIFA_1	635	463	72.9%	182	39.3%
Warradale	SEIFA_2	2,757	1,453	52.7%	643	44.3%
Wattle Range	SEIFA_2	692	250	36.1%	97	38.8%
West Beach	SEIFA_4	946	242	25.6%	103	42.6%
West Coast (SA)	SEIFA_2	766	519	67.8%	214	41.2%
West Lakes	SEIFA_3	2,305	942	40.9%	402	42.7%
Whyalla	SEIFA_1	4,401	2,964	67.3%	1,035	34.9%
Willunga	SEIFA_4	699	303	43.3%	141	46.5%
Windsor Gardens	SEIFA_3	4,428	2,269	51.2%	993	43.8%
Woodcroft	SEIFA_2	2,334	1,170	50.1%	457	39.1%
Woodville - Cheltenham	SEIFA_2	3,445	2,064	59.9%	949	46.0%
Yankalilla	SEIFA_2	1,048	574	54.8%	262	45.6%
Yorke Peninsula - Nor	SEIFA_2	1,168	713	61.0%	303	42.5%
Yorke Peninsula - Sou	SEIFA_1	571	390	68.3%	196	50.3%
	SEIFA_1	11,670				

Eligibility vs claims were plotted in metropolitan and regional matrices. The purpose of this comparison was to identify areas with high numbers of children and relatively lower utilisation to inform the potential promotional campaign. For eligibility, actual numbers of children were used as areas for targeting are more likely to be of benefit when there is a significant cohort to target. For utilisation however, the percentage was used as a measure of uptake.

This identified that in the metropolitan areas, there were 27 SA2 areas with an eligible population greater than the metropolitan median of 1100 children, and with a claim percentage less than the median of 44.1%. In regional areas, there were 13 SA2 areas with an eligible population of greater than 589 children and a claim percentage less than the regional median of 46.2%.

In the metropolitan region, these areas were typically but not exclusively concentrated in the outer north and outer south suburbs. In regional areas, these locations were typically concentrated in larger regional centres.

Figure 2: Eligibility- utilisation matrix for metropolitan Adelaide highlighting areas with >1100 children and <44.1% utilisation

Eligibility vs Claim - SA2 - Metro - High Eligibility & Low Claim %



Figure 3: Eligibility-utilisation matrix for regional areas showing

areas with >589 children and <46.2% utilisation

Eligibility vs Claim - SA2 - Regional - High Eligibility & Low Claim %



Effect of SEIFA

The Socio-Economic Indexes For Areas (SEIFA) is a statistical measure produced by the Australian Bureau of Statistics which ranks areas in Australia according to relative socio-economic advantage and disadvantage. A SEIFA score of 1 represents areas of greatest disadvantage, while SEIFA 5 represents least disadvantage. It should be noted that SEIFA is an areas based, not an individual based score. While claim rates varied across areas, there did not appear to be a consistent pattern related to SEIFA score. The highest average claim rate was for SEIFA5 areas at 45.7% with the lowest in SEIFA1 at 43.4%.

As would be expected, the percentage of children who were eligible for CDBS declined consistently across SEIFA areas. This pattern was also observed for Aboriginal and Torres Strait Islander children, although the percentage of children who remained eligible in SEIFA5 areas was far greater than for non-Aboriginal children.

While the claim rate did not vary significantly across SEIFA areas, the claim rate among Aboriginal children in SEIFA4 and SEIFA5 areas was significantly higher than Aboriginal children in SEIFA 1 to 3 areas.

Perhaps unsurprisingly, the market share of private provider claims increased with increasing levels of advantage.

Figure 4: 2020 vs 2021 comparison of key metrics by SEIFA score



YoY Comparision By SEIFA

Effect of rurality

Access to and utilisation of CDBS in regional areas has been highlighted as an area of concern. The analysis of SA data demonstrated that the proportion of children who are eligible for CDBS by region was fairly consistent across areas, with the exception of outer regional areas where there was a greater proportion of children eligible. The

data for very remote should be interpreted with caution, given APY Lands had no eligible children recorded.

The SA data demonstrated that claim percentage was fairly consistent across regions, with the exception of very remote areas where it dropped sharply. The proportion of public provider claims was highest in outer regional areas, while private providers dominated the very remote claims in South Australia. This may be a reflection of contractual arrangements in SA where private providers are well established and some travel to remote areas, and also provide services to children who would be eligible for fee-for-service non-CDBS care through the public system. The CDBS claim rate was fairly consistent for Aboriginal children (albeit lower than for non-Aboriginal children), but as with the overall numbers dropped off sharply for children living in very remote areas.

Figure 5: 2020 vs 2021 comparison of key metrics by region



YoY Comparision By Region

MC= major cities, IR= inner regional, OR= outer regional, RT= remote, VR= very remote

Effect of Age

The effect of age on utilisation was explored in metropolitan areas. This is outlined in the Table 2 and Figure 6 below, where areas of high eligibility and lower utilisation were also mapped. These maps demonstrate a high degree of overlap with Figures 2 and 3. Peak utilisation of CDBS occurred in the 5 to 8 year old age group in both metropolitan and country locations.

Table 2: Median utilisation of CDBS in metropolitan and regional areas by age group

Age group	Metro	Regional
1 – 3	28.7%	27.7%

5 – 8	54.5%	57.9%
9 – 12	51.9%	53.0%
13- 17	43.0%	44.3%

Figure 6: Areas of high eligibility and lower utilisation, by age group



Workforce impacts

The metropolitan eligibility vs claim map was compared to dental practitioner workforce data (Figure 7 below). This highlighted that there were relatively high rates of dental workforce in the inner city and south western suburbs, with comparatively fewer practitioners in outer northern suburbs. When compared to high eligibility and low utilisation rates, this suggested that some areas with lower claim rates (Tea Tree Gully, Gawler, Marion) potentially had sufficient workforce to support increased uptake. Conversely in the outer northern suburbs, low utilisation mirrored lower workforce availability.

Similar maps were also compared for country regions however, because of low population numbers in some areas (and part time / visiting dental practitioner arrangements), this can produce slightly skewed maps of workforce availability and so they are not shown. While many country areas had no dental practitioners present in that area, the data did indicate that of the larger regional centres, Mt Gambier and Port Lincoln appeared to have sufficient numbers of practitioners. The lowest rate in the major regional centres was 69 practitioners per 100, 000 people which was in Port Augusta.

Figure 7: metropolitan areas with high eligibility and low utilisation, compared with dental workforce data



LGA Metro - Total Dental Practitioners (includes Dentists, Oral health therapists, Dental hygienists, Dental therapists and Dental prosthetists) per 100k - 2021





Public vs private provider claim patterns

Similar to the eligibility vs claim analysis, matrices were created comparing the number of children claiming within an SA2 area against the percentage of claims that were made by a private provider. In metropolitan Adelaide, the private share to the market had a median of 60.1% and claim rates by private providers were fairly well clustered around this median with the majority falling between 50% and 70% in a given SA2. Interestingly, some of the areas with highest claim numbers had comparatively less private provider penetration.

In regional areas, the private to public provider split was considerably more variable. Private provider market share ranged from 12% through to 100%, however the median of 53.78% was lower than the metropolitan median. In larger regional areas where an SA Dental clinic exists, the uptake by public providers was higher than private. A combination of factors may be at play in regional areas including historical patterns of clinics and service delivery by public providers, as well as (perceived or actual) demand and market viability. While the regional utilisation average was higher than metropolitan and there was greater variability in uptake, there would still appear to be a significant proportion of country children not utilising their CDBS benefit. This highlights the need for cooperation between public and private providers in regional areas to ensure access to care for regional children and ensure service coverage reflects areas of demand.

There were 13 regional SA2s where claims were higher than the median of 287 claims, and the private provider proportion was greater than 53.7%. There were 16 metropolitan areas where the number of claims was higher than the metropolitan median of 512 and the private provider share was greater than the metropolitan median of 60.9%.

Comparing the areas with high private provider uptake (Figure 9) with areas of low overall utilisation and high eligibility (Figure 2) demonstrates there are some areas with significant opportunity for the private market to grow.

Figure 8: Claim vs Provider matric demonstrating median number of claims in metropolitan (left) and regional (right areas) plotted against private provider proportion of claims

Claim vs Public Private Matrix



Figure 9: metropolitan areas with claim numbers greater than median (512) and higher proportion (>60.9%) of private provider claims

Eligible vs Claimable %



Figure 10: Regional areas with claim numbers greater than median (287) and higher proportion (>53.7%) of private provider claims Eligible vs Claimable %



Figure 11: 2020 vs 2021 comparison of key metrics at Statistical Area 3 level



Conclusions

The utilisation rate of CDBS in South Australia is the highest nationally. Despite this, over 50% of eligible children did not access dental care via CDBS during the year in question. With the 2 year cap rule, it is not known if children accessed care in the other year, and if they did, if they didn't access in the year in question because dental care was not warranted, and/or if it was because they had exhausted their benefits.

Analysis of the data by considering the child population, eligible child population, effects of location, age, socio-economic disadvantage, Aboriginality and workforce distribution suggests the following:

- A broad marketing campaign aimed at increasing awareness of CDBS would be of benefit in an attempt to lift the overall rate above 50%.
- In metropolitan areas, there are localised areas where there are high numbers of eligible children and lower utilisation rates. These areas typically (but not always) are concentrated in the outer north and outer southern suburbs, with these areas also typically having a lower SEIFA.
- Areas of lower utilisation typically correspond to lower rates of dental practitioner workforce than areas with higher utilisation, which suggests limited access may be a contributor, however this analysis is one of correlation not causation.
- In country areas, utilisation of CDBS in very remote areas is significantly lower than any other region. Supporting access by remote communities should be a priority to support utilisation.
- Utilisation of CDBS is lower for Aboriginal children than for non-Aboriginal children, and this is particularly pronounced in very remote areas. Strategies to increase uptake among Aboriginal families should be considered.
- Highest rates of CDBS utilisation were observed in the 5 to 8 and 9 to 12 age groups. Promoting the adoption of early dental care, and continuing this through teenage years in preparation for adulthood could be considered.