

Biting Costs

Following the “Tooth be told” report, a supplementary analysis of dental care expenditure in New Zealand

Prepared by: Association of Salaried Medical Specialists

The biting cost of dental care

Say the words “I have to go to the dentist” and you will jokingly be told to “take out a bank loan”. While said tongue in cheek, it has a grounding in reality.

This report uses Market View EFTPOS transaction data to gain a better understanding of the cost of private dental care to individuals – regionally and nationally. It uses single EFTPOS transactions as a proxy for visits to the dentist. In only measuring EFTPOS transactions and excluding credit card, afterpay, bank transfers or cash payments, the dollar values represent the minimum spent at private dental practices.

The results are surprising. New Zealanders spend \$2.45 million every day at dental practices through EFTPOS. That adds up to \$896 million in 2021.

The average transaction was \$353 per swipe, representing about 50 per cent of an adult minimum-wage earner’s weekly income.

Dental is an outlier in New Zealand’s health care system in that it is almost solely treated through private, for-profit practices. Those who can’t afford dental care often miss out. But tooth decay and dental problems have lasting impacts on our long term physical and mental health.

For too many adults, proper tooth care is becoming unaffordable. Instead, many put their faith in painkillers. We need more dentists and more subsidised access to dental care to avoid the horror stories that often already appear in our communities.

This report looks to quantify the private costs of dental care in New Zealand to help frame decision-making and provide context for media outlets and researchers. It complements ASMS’s earlier report *Tooth be told*.

1. Extending subsidised basic dental care for children to adults.
2. Urgently developing a workforce plan which includes strategies to ensure services are fairly distributed nationally.
3. Make options available for dentists to be employed on salary as part of the public health system.
4. Increase the oral health learning component in the medical curricula
5. Routinely collect and report data on the state of dental health
6. Fully implement recommendations from the 2019 Welfare Expert Advisory Group.

Value of transactions by year 2017-2022

Region	2017	2018	2019	2020	2021	(To date) 2022	Total
Auckland	\$275,393,136	\$294,382,381	\$312,375,768	\$302,972,011	\$312,998,703	\$281,784,886	\$1,779,906,884
Bay of Plenty	\$45,427,391	\$50,928,369	\$53,639,296	\$56,125,906	\$66,572,360	\$53,043,116	\$325,736,438
Canterbury	\$80,284,886	\$85,050,133	\$92,625,626	\$93,498,702	\$108,264,885	\$85,511,124	\$545,235,356
Gisborne-Hawke’s Bay	\$24,413,170	\$27,600,984	\$29,255,239	\$29,848,464	\$34,812,707	\$27,036,939	\$172,967,504
Manawatu-Wanganui	\$31,887,674	\$35,245,674	\$36,218,764	\$37,185,514	\$42,794,250	\$32,791,950	\$216,123,826
Marlborough	\$6,469,351	\$6,493,444	\$6,855,271	\$6,602,630	\$7,884,544	\$5,692,996	\$39,998,236
Nelson	\$10,988,426	\$11,304,264	\$11,855,936	\$12,198,412	\$14,467,545	\$12,070,983	\$72,885,565
Northland	\$22,396,090	\$24,630,699	\$28,432,043	\$29,338,414	\$31,339,907	\$24,886,404	\$161,023,556
Otago	\$28,386,483	\$31,532,312	\$35,370,279	\$34,491,865	\$44,005,548	\$34,665,758	\$208,452,245

Southland	\$10,525,171	\$11,434,644	\$11,417,210	\$11,664,379	\$13,591,280	\$12,545,535	\$71,178,218
Taranaki	\$13,439,797	\$13,878,577	\$15,334,232	\$14,989,635	\$17,468,312	\$13,739,307	\$88,849,860
Tasman-West Coast	\$8,103,895	\$9,499,299	\$10,194,584	\$9,800,118	\$11,510,199	\$9,048,615	\$58,156,709
Waikato	\$56,238,114	\$62,503,282	\$66,521,502	\$66,418,357	\$74,329,746	\$62,597,272	\$388,608,272
Wellington	\$87,246,584	\$96,523,783	\$101,524,425	\$99,092,259	\$116,738,236	\$89,986,756	\$591,112,042
Grand Total	\$701,200,167	\$761,007,845	\$811,620,173	\$804,226,666	\$896,778,222	\$745,401,642	\$4,720,234,715

The table above shows the annual value of EFTPOS transactions at private dental practices in New Zealand.

The data shows a rising total spend over the past five years ahead of the rate of inflation.

The table below shows some regions have seen higher rates of increase in the value of sales than others, by comparing year on year growth.

Region	2018	2019	2020	2021
Auckland	6.90%	6.11%	-3.01%	3.31%
Bay of Plenty	12.11%	5.32%	4.64%	18.61%
Canterbury	5.94%	8.91%	0.94%	15.79%
Gisborne-Hawke's Bay	13.06%	5.99%	2.03%	16.63%
Manawatu-Wanganui	10.53%	2.76%	2.67%	15.08%
Marlborough	0.37%	5.57%	-3.69%	19.42%
Nelson	2.87%	4.88%	2.89%	18.60%
Northland	9.98%	15.43%	3.19%	6.82%
Otago	11.08%	12.17%	-2.48%	27.58%
Southland	8.64%	-0.15%	2.16%	16.52%
Taranaki	3.26%	10.49%	-2.25%	16.54%
Tasman-West Coast	17.22%	7.32%	-3.87%	17.45%
Waikato	11.14%	6.43%	-0.16%	11.91%
Wellington	10.63%	5.18%	-2.40%	17.81%

Number of Dental providers

Market View categorises every outlet it provides EFTPOS services for. If an outlet has multiple EFTPOS terminals on a particular site, their data is aggregated data. From the 2022 Market View date there were 1176 outlets categorised as providing dental services. The table below breaks this down by region.

Region	Total Number of EFTPOS outlets providing dental services
Auckland	449
Canterbury	146
Wellington	124
Waikato	101
Bay of Plenty	80
Otago	62
Gisborne-Hawke's Bay	50

Manawatu-Wanganui	41
Northland	31
Southland	25
Taranaki	21
Nelson	19
Tasman -West Coast	15
Marlborough	11

There have only been small changes in the number of outlets over the five-year period.

Number of transactions by year 2017-2022

The table above shows the number of EFTPOS transactions per year in each region for providing dental services. This gives some indication of the number of visits that are made to dentists in total (based on at least on transaction per visit) to the dentist people make each year. However, it is not indicative of patient numbers, because the same person could make multiple transactions.

Region	2017	2018	2019	2020	2021	(To date) 2022	Total
Auckland	791,863	829,529	860,937	805,349	798,476	703,943	4,790,097
Bay of Plenty	147,600	165,999	173,542	174,663	194,733	145,505	1,002,042
Canterbury	293,732	307,065	326,480	317,445	352,802	271,287	1,868,811
Gisborne -H.Bay	99,051	110,241	114,315	108,971	117,470	87,216	637,264
Manawatu-Wanganui	114,445	124,154	126,321	121,418	133,920	98,252	718,510
Marlborough	26,785	26,737	27,398	25,216	29,379	20,364	155,879
Nelson	39,527	40,975	41,902	39,516	45,676	37,633	245,229
Northland	79,967	85,135	91,865	89,890	95,147	74,956	516,960
Otago	113,825	123,469	134,111	125,441	149,647	111,607	758,100
Southland	40,199	42,956	43,524	42,002	43,409	38,380	250,470
Taranaki	49,644	50,871	52,743	50,966	56,637	43,082	303,943
Tasman-West Coast	32,637	35,654	39,379	36,186	40,211	30,991	215,058
Waikato	185,962	204,706	213,256	206,196	217,911	177,375	1,205,406
Wellington	313,606	344,658	356,455	333,933	374,556	273,885	1,997,093
Grand Total	2,328,843	2,492,149	2,602,228	2,477,192	2,649,974	2,114,476	14,664,862

Using this data and the total value of transactions, we can find the average amount being paid per transaction for each visit to a dental care facility. This can act as a proxy for the average cost of going to the dentist.

Average transaction cost	2017	2018	2019	2020	2021	(To date) 2022
Auckland Region	\$348	\$355	\$363	\$376	\$392	\$400
Bay of Plenty Region	\$308	\$307	\$309	\$321	\$342	\$365
Canterbury Region	\$273	\$277	\$284	\$295	\$307	\$315
Gisborne / Hawke's Bay Region	\$246	\$250	\$256	\$274	\$296	\$310
Manawatu-Wanganui Region	\$279	\$284	\$287	\$306	\$320	\$334
Marlborough Region	\$242	\$243	\$250	\$262	\$268	\$280

Nelson Region	\$278	\$276	\$283	\$309	\$317	\$321
Northland Region	\$280	\$289	\$309	\$326	\$329	\$332
Otago Region	\$249	\$255	\$264	\$275	\$294	\$311
Southland Region	\$262	\$266	\$262	\$278	\$313	\$327
Taranaki Region	\$271	\$273	\$291	\$294	\$308	\$319
Tasman / West Coast Region	\$248	\$266	\$259	\$271	\$286	\$292
Waikato Region	\$302	\$305	\$312	\$322	\$341	\$353
Wellington Region	\$278	\$280	\$285	\$297	\$312	\$329
National Average	\$301	\$305	\$312	\$325	\$338	\$353

The table above shows the cost of each dental visit steadily rising to over \$300 in all but two smaller regions. This suggests the previous MSD allowance of \$300 per year for dental care would only have only covered one visit to a dentist per year. Compared to the national average rent payments in New Zealand, an average dental visit is \$120 more than the median weekly rent for a room in a flat.

Capacity to treat patients

Using the total number of transactions, we can calculate a region's average daily number of transactions. Using the number of EFTPOS outlets we can then calculate an average daily workload of each dental practice to estimate the capacity to treat patients in each region.

The table below show the average sales per EFTPOS outlet for dental services by region in 2021.

Region	Number of outlets	Total Sales (\$)	Average Annual Sales per Outlet 2021
Auckland	449	\$312,998,703	\$697,101.79
Bay of Plenty	80	\$66,572,360	\$832,154.50
Canterbury	146	\$108,264,885	\$741,540.31
Gisborne- Hawke's Bay	50	\$34,812,707	\$696,254.14
Manawatu-Wanganui	41	\$42,794,250	\$1,043,762.20
Marlborough	11	\$7,884,544	\$716,776.73
Nelson	19	\$14,467,545	\$761,449.71
Northland	31	\$31,339,907	\$1,010,964.73
Otago	62	\$44,005,548	\$709,766.91
Southland	25	\$13,591,280	\$543,651.19
Taranaki	21	\$17,468,312	\$831,824.40
Tasman- West Coast	15	\$11,510,199	\$767,346.60
Waikato	101	\$74,329,746	\$735,938.08
Wellington	124	\$116,738,236	\$941,437.38
Total	1175	\$896,778,222	\$763,215.51

Region	Number of outlets	Total Number of Transactions	Average Transactions per Outlet	Average Transactions per Outlet per Day*
Auckland	449	798,476	1778	7.1
Bay of Plenty	80	194,733	2434	9.7
Canterbury	146	352,802	2416	9.7
Gisborne-Hawke's Bay	50	117,470	2349	9.4
Manawatu-Wanganui	41	133,920	3266	13.1
Marlborough	11	29,379	2671	10.7
Nelson	19	45,676	2404	9.6
Northland	31	95,147	3069	12.3

Otago	62	149,647	2414	9.7
Southland	25	43,409	1736	6.9
Taranaki	21	56,637	2697	10.8
Tasman-West Coast	15	40,211	2681	10.7
Waikato	101	217,911	2158	8.6
Wellington	124	374,556	3021	12.1
Total	1175	2,649,974	2,255	9.02

**based on the assumption of 250 working days in a year.*

The table above shows the average number of transactions per outlet per day, based on the assumption of 250 working days in a year.

Tooth be told (Page 9) identifies Aotearoa has a relative lack of dentists. We rank 19th out of 21 OECD countries in terms of the number of dentists per 1,000 of the population.

If we assume each transaction represents one patient visit, this allows us to estimate that Aotearoa currently has capacity to treat 2.65 million patients per year through private practices. Based on an electoral role of 3.9 million adults over the age of 18, private practice currently has the capacity to see three quarters of the population, assuming one trip per person per year.

Summary

New Zealanders currently make 2.6 million trips to the dentists each year. This has risen from 2.3 million in 2017.

On average every dental outlet turns over \$763,000 per year through their EFTPOS terminals. And, based on the assumption of 250 working days in a year, averages nine transactions a day.

On average people in 2022 spend approximately \$353 each time they go to the dentist. The actual figure could be higher given credit card transactions and higher purchase arrangements are not included.

That figure has risen steadily since 2017 and as it continues to rise, it risks becoming even less affordable and the level of unmet need risks growing even further. *Tooth be told* identified (page 8) already that 37 per cent of New Zealand adults skipped dental treatments in 2020 due to the cost.

Thoughts from some of our dentists

“We need more access to dental care in New Zealand. In the old days it was common to have your teeth removed, even before marriage. It was sometimes done as a gift to the husband to make things cheaper. In New Zealand we are all about pulling teeth instead of treating the cause of decay.”

Jonathan Broadbent - Otago University Dental School

“We’re seeing more and more adults coming into the emergency department after taking pliers to their own teeth. We’re seeing 25–29-year-olds coming in with and having all of their teeth removed because - it’s heart-breaking - most cannot afford to get treatment.”

“Treatment improves lives. People with poor dental health are miserable. It affects all facets of their lives. It [working as a public dentist] can be completely devastating and depressing. You’re there ripping out people’s teeth. Sometimes all of their teeth.”

“You’re draining pus and from their swollen faces each time you pull a tooth out. In one hand it is good. You are helping these people. But it’s also depressing and saddening at the same time. They need help. The system is falling over.”

Fraser Dunbar – public dentist, South Canterbury Public Dentist.

“We need to provide better working conditions for dentists to make them want to work and stay working in the public system. We do get some in, but they usually last about one to two years and take off again to private practices.

“The Government needs to reward people working in areas where they need dentists to set up. Areas like the West Coast where nearly every dentist has retired.”

“We can see the effects of intervention. Over the last 30 to 40 years dental decay rates started to decline. We seem to have taken our foot off the gas in recent years and as a result people are starting to suffer. We have to change strategies.”

Public health dentist, Canterbury.

Thoughts from ASMS executive director, Sarah Dalton

“Dental care in New Zealand in Aotearoa is prohibitively expensive and feeds directly into overall health inequities. Teeth and oral health are integral to our general wellbeing but funding for oral health care is a paltry 2 per cent of overall government health spending.

“Let’s empower people to no longer have to choose between paying their rent or going to the dentist. Free dental care for adults, rolled out correctly, will see the quality of life improve for millions and will likely pay off its cost with flow-on benefits of a health workforce.

“Forty per cent of adults have unmet need for dental care due to cost. But the provision of dental services is inconsistent. Famously, Wairoa has no dentist. And, on the West Coast, while there are two dentists in Hokitika, going south the next dentist is in Wanaka.”

“Health funders need to show some courage. Free dental care carries a weighty price tag but, as well as improving the lives of more than one million New Zealanders, free adult dental care will save us money in the long run. New Zealand Dental Association research in 2019, using Treasury’s cost-benefit analysis tools, found a return of \$1.60 on every dollar spent. Imagine if you could get that return on your term deposit.”

“We need to separate this idea that teeth are simply not part of health. Oral health has huge physical, and mental flow-on benefits.”

“Our dentists are seeing 20 to 24 year olds turning up to emergency departments having all of their teeth removed with most never going to a dentist before this procedure had to occur. Early prevention through easier access to dental care could have seen their lives changed.”