

THE USE OF TELEHEALTH IN AUSTRALIA DURING THE CORONAVIRUS (COVID-19) PANDEMIC FOR MEDICAL PRACTITIONERS: A RETROSPECTIVE EPIDEMIOLOGICAL ANALYSIS

Joshua Lee*¹, Joon Soo Park^{1,2,3}, Kate N Wang^{4,5}, Boxi Feng¹, Marc Tennant¹, Estie Kruger¹

1. International Research Collaborative - Oral Health and Equity, The University of Western Australia, Crawley, Western Australia
2. UWA Dental School, The University of Western Australia, Nedlands, Western Australia
3. Division of Optometry - School of Allied Health, The University of Western Australia, Crawley, Western Australia
4. School of Health and Biomedical Sciences, RMIT University, Bundoora, Victoria
5. Pharmacy Department, Alfred Health, Melbourne, Victoria

Correspondence: jleeresearch1@gmail.com

ABSTRACT

INTRODUCTION:

New Medicare Benefits Schedule (MBS) telehealth item codes were added in 2020 to allow Australians to gain access to medical services during COVID-19 lockdown restrictions. Previous studies have been conducted on the utilisation of specific MBS item codes however none have been conducted on all medical practitioner telehealth item codes.

OBJECTIVE:

This retrospective epidemiological analysis aims to determine the utilisation rate of newly introduced medical practitioner telehealth MBS item codes and compare them with the usage of existing in-person item codes

METHODS:

The utilisation of 319 MBS item codes were extracted from the Medicare Statistics Database between March 2020 to March 2021. Using count and population statistics a population adjusted rate was generated and a linear regression analysis undertaken.

RESULTS:

A total of 199,059,309 in-person and telehealth services (Male, n=84,007,935; 42.2%, Female, n=115,051,374; 57.8%) were utilised during the study period. 147,697,104 were in-person compared to 51,191,898 telehealth services. In-person usage decreased by 27.5% while telehealth increased by 358.8%. In-person utilisation increased by 32.4% as the year continued while the telehealth utilisation decreased by 40.7%. There was a non-significant increase in total in-person item code utilisation ($p=0.76$) and a non-significant decrease ($p=0.32$) in the total telehealth item codes used

CONCLUSION:

There was initially increased usage of telehealth especially during lockdown restrictions. However, when lockdowns eased, usage of telehealth decreased while in-person increased. Regardless, telehealth item codes continued to be used despite changes to eligibility criteria and lockdown restrictions easing. Hence, it appears that patients are accepting of telehealth as a healthcare delivery method.

KEYWORDS

telehealth; teleconsult; public health; Australia; Medicare Benefits Schedule; COVID-19

INTRODUCTION

Telehealth has been defined as delivering various aspects of health information, prevention, monitoring, and medical care through the use of technology-based virtual platforms. [1] Telehealth is used to deliver healthcare remotely to patients with obstacles such as distance or frailty, obtain a second opinion from a specialist, provide education, improve efficiency of hospital departments and triage patient referrals. [2-5] Telehealth has been beneficial during the coronavirus (COVID-19) pandemic as government mandated lockdowns created movement restrictions creating difficulties to access healthcare in-person. [6] Telehealth allowed remote delivery of care while reducing contact reducing virus transmission. Additionally, it was used to triage patients to determine emergency care eligibility protecting both vulnerable patients and HCPs. [2, 7] While telehealth has been widely adopted, there has been some resistance due to perceived difficulties in diagnostic capabilities, data security as well as high cost and time investment being required. [5, 8] Clinicians and patients may also find telehealth difficult to use due to a lack of knowledge and education. [9, 10]

Telehealth in Australia is provided through the Medicare Benefits Schedule (MBS) in the public health sector and by private health insurers in the private sector.¹¹ Currently in Australia, telehealth is mainly delivered through the public health system.¹² First introduced into the MBS in 2011, the use of telehealth rapidly grew during the COVID-19 pandemic to facilitate provision of telehealth during government mandated restrictions.¹³ HCPs provide health care services to patients and charge the corresponding item code. The cost of this code is paid by the patient which is fully or partially refunded by the Department of Human Services. In response to the pandemic, new telehealth item codes were added to the MBS so medical practitioners could bill appropriately. The criteria to allow medical practitioners to provide telehealth was also relaxed as previously only patients in vulnerable groups could access telehealth. [14] This allowed all Australians to access telehealth. The utilisation of these item codes are published onto the Medicare Statistics Database (MSD)

which is open-access data. [15] This data is a national aggregate, hence, it is de-identified. This data can be used to compare the usage of telehealth item codes against the face-to-face codes to determine the adoption of telehealth.

It is widely recognised that telehealth usage surged during the COVID-19 pandemic. However, there has been little research conducted in Australia examining the trends over the course of the pandemic and how this varies by geography and demographics. Previous studies have been conducted only analysing trends for the newly introduced GP telehealth codes for a period of 3 months from March 2020 to May 2020. [16] Understanding the variation and trends could help shape future policies regarding the funding of telehealth post-pandemic.

AIMS

This retrospective epidemiological analysis aims to determine the utilisation rate of newly introduced medical practitioner telehealth MBS item codes and compare them with the usage of existing in-person item codes in Australia.

METHODS

The study is reported according to the STROBE guidelines. [17]

ETHICS APPROVAL

The data was gathered from the open-access Medicare Statistics Database. Therefore, no ethics approval was required.

MBS ITEM CODES

The Australian Department of Health outlined new telehealth/telephone item codes adjacent to equivalent existing in-person item codes allowing for a direct comparison. [18] The data originated from services provided by medical practitioners.

A total of 319 MBS item codes were examined. The item codes outlined in the MBS factsheet were split into 4 subgroups and hence our study followed the same system.

[14] The categories of codes and number of codes under each category is listed below;

1. General practitioners (GP)
 - In-person: 30
 - Telehealth/Telephone: 56
2. Other medical practitioners
 - In-person: 33
 - Telehealth/Telephone: 62
3. Specialists - Specialists, consultant physician, psychiatrist, paediatrician, geriatrician, public health physician, neurosurgeon and anaesthetist plus obstetricians, GPs, midwives, nurses or Aboriginal and Torres Strait Island health practitioner attendances for out of hospital attendances
 - In-person: 44
 - Telehealth/Telephone: 88
4. Dental practitioner in the practice of oral and maxillofacial surgery attendances (OMFS)
 - In-person: 2
 - Telehealth/Telephone: 4

STUDY PERIOD

A study period of March 2020 to March 2021 was chosen. This study period was chosen as a large number of new MBS telehealth item codes were introduced in March 2020 in response to the COVID-19 pandemic. Prior to this date, only a small number of codes were present in the MBS. A study period of one year was chosen as that was the available data when this research was conducted.

STUDY POPULATION

The study population was Australian residents who are eligible for the MBS. This includes Australian or New Zealand citizens, permanent resident visa holders, or applicants for a permanent resident visa excluding a parent visa.¹⁹ According to the Australian Bureau of Statistics, at the end of March 2021 the Australian population, therefore those eligible for Medicare, was 25,704,340. [20]

STATISTICAL ANALYSIS

Medicare item usage reports were generated from the MSD. Demographics were separated to show usage per state, age in 10-year intervals, and sex. Using count and population statistics, a population adjusted-rate of item code utilisation was generated (count per 100,000). These data were imported into GraphPad Prism 9.00 for Windows (GraphPad Software, CA, USA). The count and the rate were plotted against time and a linear regression analysis

undertaken. After linear regression a slope per 100,000 was generated. Additionally, to assess correlation, goodness of fit (R^2), Pearson's r (Range=-1 to 1) and a two-tailed P value was generated. Statistical significance was $p < 0.05$. The statistical analysis was completed for the Australian population, each individual state and the different subgroups.

RESULTS

DEMOGRAPHICS

A total of 199,059,309 in-person and telehealth services (male, $n=84,007,935$; 42.2%, female, $n=115,051,374$; 57.8%) were utilised during the study period. 147,697,104 were in-person compared to 51,191,898 telehealth services. Victoria had the highest utilisation of telehealth (37.1%) while New South Wales had the highest utilisation of in-person services (27.7%). Victoria had the highest telehealth utilisation rate (2890 per 100,000) and New South Wales had the highest in-person utilisation rate (6197 per 100,000).

When analysing demographics of the population who utilised these MBS item codes, there was a discrepancy of 164,635 (0.08%) item codes. We are uncertain where this discrepancy arose. Regarding age groups, 55-64 had the highest utilisation of telehealth services (14.3%) whilst age 65-74 had the highest utilisation of in-person services (16.2%). Females had the highest proportion of total item code utilisation (57.8%), in-person (56.5%) and telehealth (61.6%) item code utilisation.

COUNT

Total

Between March 2020 to April 2020, a sharp decline in the in-person usage is observed with a corresponding increase in the telehealth usage (Figure 1). In-person usage decreased by 27.5% while telehealth increased by 358.8%. In-person utilisation increased by 32.4% as the year continued while the telehealth utilisation decreased by 40.7%. All states except Victoria followed a similar trend (Figure 2). Victoria had decreased in-person usage (30.8%) from March 2020 to August 2020 with a corresponding increase in telehealth (540.2%) during the same period. In-person usage then increased by 30.5% from August 2020 to March 2021 with a decrease of 43.1% in telehealth utilisation (Figure 2).

FIGURE 1: GRAPH OF TOTAL ITEM USAGE VERSUS TIME FOR IN-PERSON AND TELEHEALTH

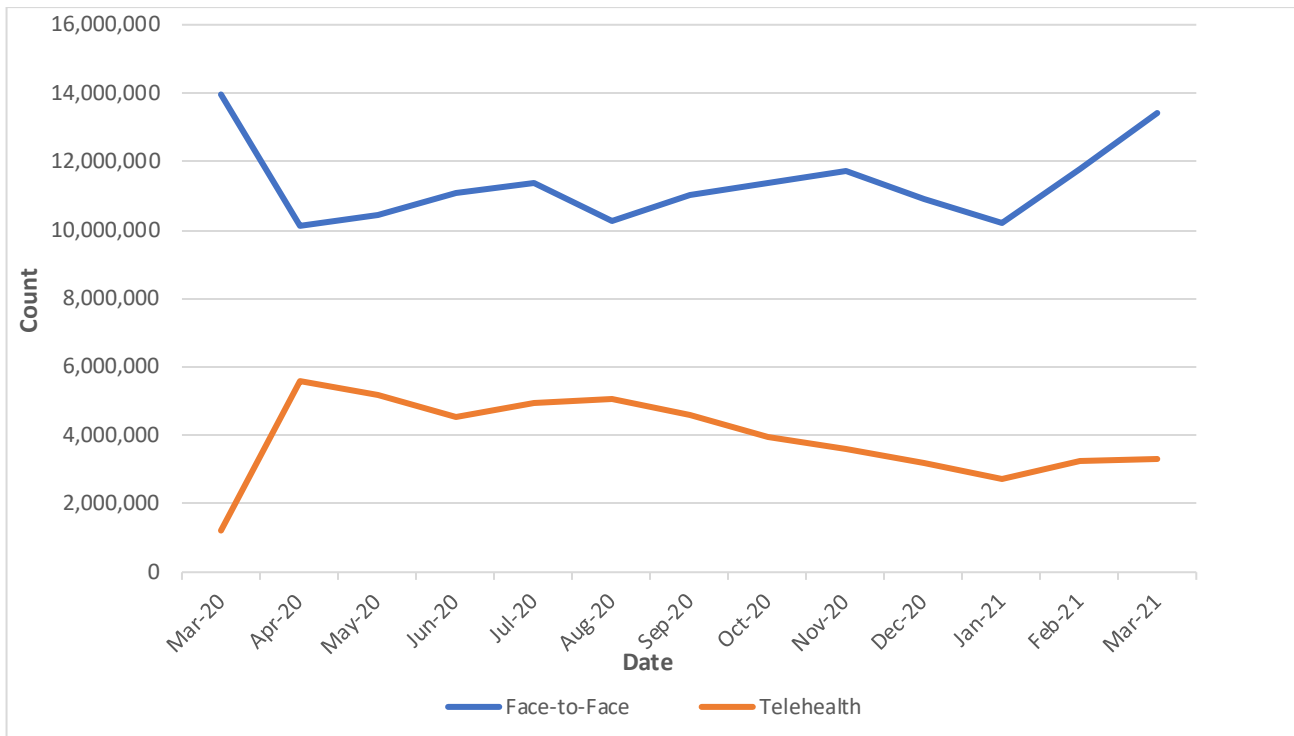
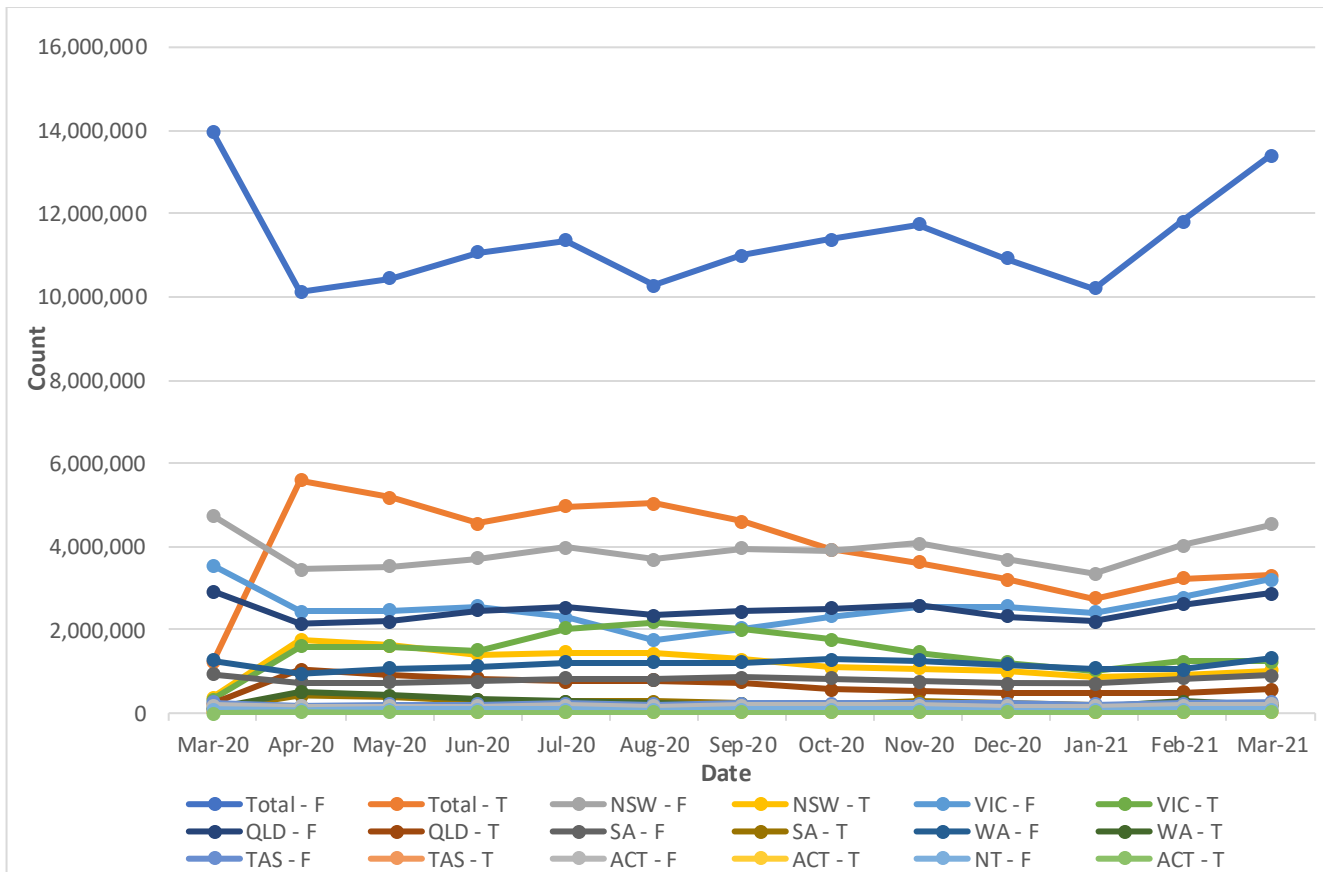


FIGURE 2: GRAPH OF TOTAL COUNT OF IN-PERSON AND TELEHEALTH ITEM CODES BY STATE



POPULATION ADJUSTED RATE

From the linear regression analysis on the population adjusted rate, there was a non-significant increase in total in-person item code utilisation ($p=0.76$) and a non-significant decrease ($p=0.32$) in the total telehealth item codes used (Table 1). All states and territories had non-statistically significant increased in-person utilisation. New South Wales (NSW), Victoria (VIC), Queensland (QLD), South Australia (SA), Western Australia (WA), Australian Capital Territory (ACT) and Northern Territory (NT) had non-significant decreased telehealth utilisation while Tasmania had a statistically significant decrease ($p=0.03$) (Table 1).

GP

Telehealth GP service utilisation had a 351.5% increase from March 2020 to April 2020 with a corresponding 24.4% in-person decrease (Figure 3). From April 2020 to March 2021 there was a 22.9% in-person increase and a 38.8% decrease in telehealth utilisation. Linear regression analysis demonstrated that in-person services had a non-significant decrease ($p=0.90$) in GP in-person service usage (Table 1). NSW, VIC, SA and NT had non-significant decreased utilisation while QLD, WA, TAS and ACT had non-significant increases. Australia wide there was a non-significant decrease in telehealth utilisation ($p=0.35$). NSW, VIC, QLD, SA, WA, ACT and NT had non-significant decreases as well. Tasmania had a statistically significant decrease in telehealth GP utilisation ($p=0.03$) (Table 1).

OMFS

In-person OMFS services were utilised 60.2% less from March 2020 to April 2020 after which usage increased by 195.4% (Figure 3). Telehealth item codes for OMFS were only introduced in May 2021. There was a 443.1% increase in usage from May 2020 to September 2020 followed by a 40.4% decrease from September 2020 to March 2021. Linear regression analysis shows that Australia wide there was a non-significant increase in in-person utilisation ($p=0.422$) (Table 1). NSW, VIC, QLD, SA, WA had non-significant increases in in-person utilisation. TAS and ACT had minimal in-person usage and hence the slope was 0 (Table 1). Therefore, no significant difference in usage was observed. Australia wide, there was a non-significant increase in telehealth service utilisation ($p=0.51$). NSW, QLD, SA, ACT had non-significant decreased telehealth

utilisation. VIC, WA and NT had non-significant increased telehealth usage while TAS had a statistically significant increase (Table 1).

Other health practitioners

In-person item codes for other health practitioners had 29.3% decreased utilisation from March 2020 to April 2020 after which there was a 13.7% increase (Figure 3). Telehealth item codes had 455.4% increased utilisation from March 2020 to April 2020 after which usage declined 39.2%. In VIC specifically, utilisation increased by 635.2% from March 2020 until August 2020 after which there was a decrease of 39.2%. Linear regression analysis of the population adjusted rate demonstrates that in Australia there was a non-significant decrease in in-person item code utilisation ($p=0.12$) (Table 1). NSW, VIC, QLD, WA and ACT also had non-significant decreases in in-person other health practitioner item code utilisation. SA had a statistically significant decrease in other health practitioner in-person services ($p = 0.02$) while TAS ($p = 0.00$) and NT ($p = 0.00$) had statistically significant increased usage. There was a non-significant decrease in the utilisation rates of other health practitioner telehealth services in Australia ($p = 0.503$) and in all states (Table 1).

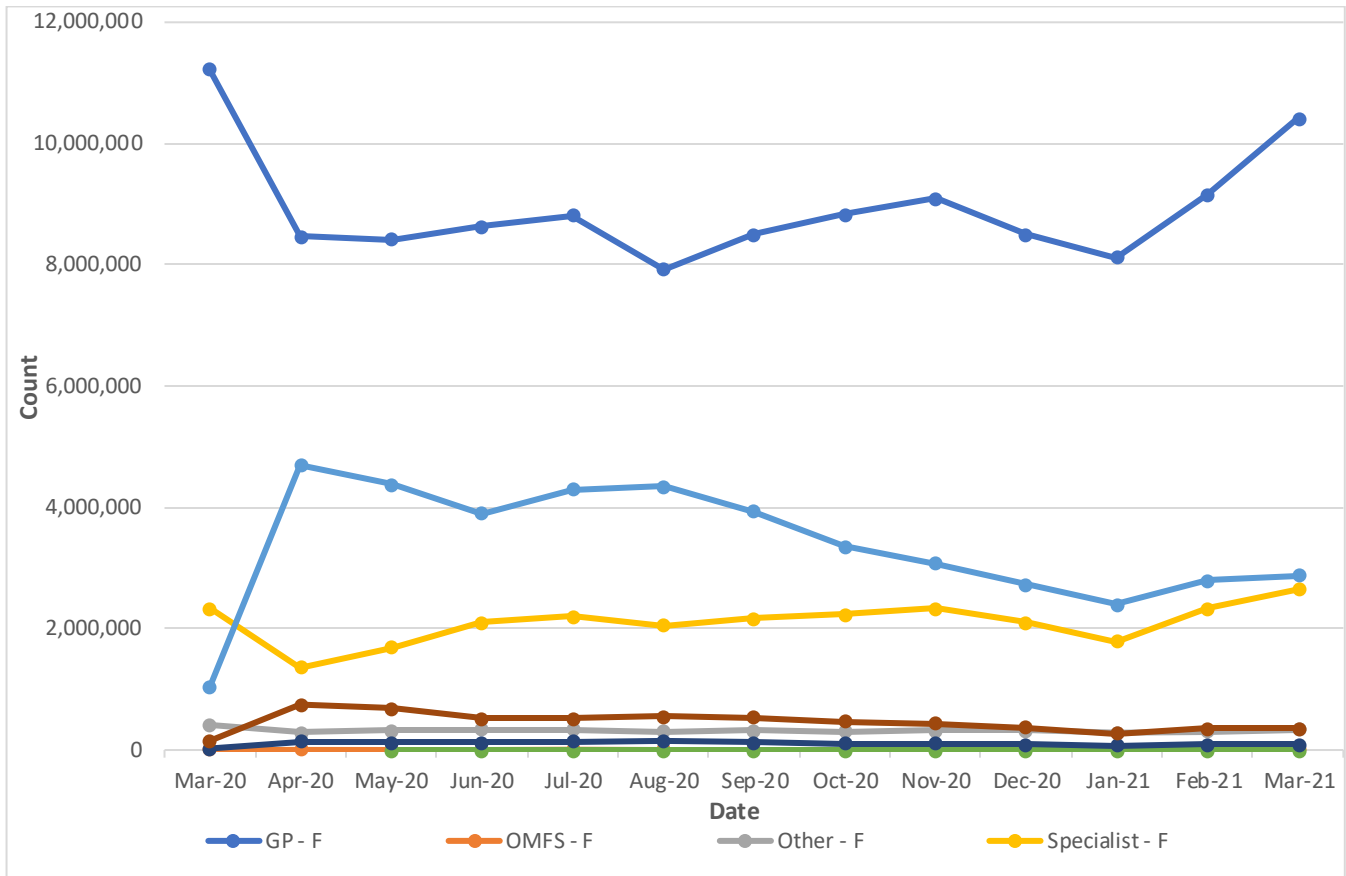
Specialists

Specialist in-person item code utilisation in Australia decreased by 41.9% from March 2020 to April 2020 (Figure 3). Usage then increased by 95.4% from April 2020 to March 2021. Telehealth specialist item code utilisation increased by 392.8% from March 2020 to April 2020 followed by a 52.9% decrease from April 2020 to March 2021. Usage of specialist telehealth item codes in VIC differed from the rest of Australia. In VIC usage increased from March 2020 to April 2020 by 351.3% followed by a 19.2% decrease from April 2020 to June 2020. Usage then increased by 41.6% between June 2020 and August 2020 followed by a 46.5% decrease from August 2020 to March 2021 (Figure 3). Linear regression analysis of the population adjusted rate demonstrates that there was a non-significant increase in utilisation of in-person services in Australia ($p = 0.09$) and in individual states (Table 1). Telehealth utilisation had a non-significant decrease in Australia ($p = 0.16$) and in individual states (Table 1).

TABLE 1: LINEAR REGRESSION ANALYSIS OF POPULATION-ADJUSTED RATE OF MBS ITEM CODE UTILISATION

		NSW	VIC	QLD	SA	WA	TAS	ACT	NT	Total
In-person (Total)	Slope	0.80	0.69	1.54	0.40	2.06	4.36	2.18	-0.75	1.12
	R ² / r	0.00/0.06	0.00/0.04	0.02/0.13	0.00/0.04	0.04/0.20	0.14/0.37	0.06/0.24	0.01/-0.09	0.01/0.09
	P value	0.84	0.90	0.67	0.90	0.52	0.22	0.43	0.76	0.76
		Not Sig	Not Sig	Not Sig	Not Sig	Not Sig	Not Sig	Not Sig	Not Sig	Not Sig
Telehealth (Total)	Slope	-3.88	-0.81	-4.66	-5.15	-5.20	-10.56	-5.40	-0.60	-3.61
	R ² / r	0.11/ -0.34	0.00/ -0.04	0.18/ -0.42	0.16/ -0.40	0.22/ -0.47	0.35/ -0.59	0.28/ -0.53	0.02/ -0.14	0.09/ -0.30
	P value	0.26	0.89	0.15	0.18	0.11	0.03	0.06	0.64	0.32
		Not Sig	Not Sig	Not Sig	Not Sig	Not Sig	Sig	Not Sig	Not Sig	Not Sig
In-person (GP)	Slope	-0.92	-0.74	0.21	-1.21	0.77	2.88	1.25	-1.76	-0.37
	R ² / r	0.01/-0.10	0.00/-0.05	0.00/0.02	0.02/-0.15	0.01/0.10	0.11/0.34	0.03/0.18	0.06/-0.24	0.00/-0.04
	P value	0.75	0.87	0.94	0.62	0.75	0.26	0.55	0.43	0.90
		Not Sig	Not Sig	Not Sig	Not Sig	Not Sig	Not Sig	Not Sig	Not Sig	Not Sig
Telehealth (GP)	Slope	-2.92	-0.39	-4.00	-4.05	-4.41	-9.63	-4.63	-0.59	-2.87
	R ² / r	0.09/-0.31	0.00/-0.03	0.17/-0.41	0.14/-0.38	0.22/-0.46	0.36/-0.60	0.29/-0.54	0.02/-0.15	0.08/-0.28
	P value	0.31	0.94	0.16	0.20	0.11	0.03	0.06	0.63	0.35
		Not Sig	Not Sig	Not Sig	Not Sig	Not Sig	Sig	Not Sig	Not Sig	Not Sig
In-person (OMFS)	Slope	0.004	0.003	0.003	0.005	0.004	0.005	0.000	0.000	0.003
	R ² / r	0.07/ 0.26	0.12/ 0.34	0.15/ 0.39	0.09/ 0.31	0.07/ 0.26	0.030/ 0.17	1.000/ NA	1.000/ NA	0.060/ 0.24
	P value	0.39	0.25	0.19	0.310	0.39	0.57	-	-	0.42
		Not Sig	Not Sig	Not Sig	Not Sig	Not Sig	Not Sig	-	-	Not Sig
Telehealth (OMFS)	Slope	-0.00005	0.0008	-0.0002	-0.0007	0.0005	0.002	-0.00004	0.000075	0.0002
	R ² / r	0.06/ -0.25	0.09/ 0.31	0.02/ -0.13	0.25/ -0.50	0.16/ 0.40	0.68/ 0.82	0.004/ -0.06	0.04/ 0.20	0.05/ 0.23
	P value	0.46	0.36	0.69	0.12	0.23	0.002	0.86	0.56	0.51
		Not Sig	Not Sig	Not Sig	Not Sig	Not Sig	Sig	Not Sig	Not Sig	Not Sig
In-person (Other Health Practitioner)	Slope	-0.15	-0.26	-0.04	-0.21	-0.13	0.23	-0.18	0.58	-0.14
	R ² / r	0.19/ -0.44	0.19/ -0.43	0.01/ -0.11	0.39/ -0.62	0.22/ -0.47	0.59/ 0.77	0.26/ -0.51	0.75/ 0.87	0.20/ -0.45
	P value	0.13	0.14	0.72	0.02	0.10	0.00	0.08	0.00	0.12
		Not Sig	Not Sig	Not Sig	Sig	Not Sig	Sig	Not Sig	Sig	Not Sig
Telehealth (Other Health Practitioner)	Slope	-0.08	-0.003	-0.09	-0.14	-0.14	-0.08	-0.08	0.02	-0.07
	R ² / r	0.07/ -0.27	0.00/ -0.01	0.13/ -0.36	0.12/ -0.34	0.27/ -0.52	0.13/ -0.36	0.12/ -0.34	0.16/ 0.40	0.04/ -0.20
	P value	0.38	0.99	0.23	0.25	0.07	0.23	0.25	0.18	0.50
		Not Sig	Not Sig	Not Sig	Not Sig	Not Sig	Not Sig	Not Sig	Not Sig	Not Sig
In-person (Specialist)	Slope	1.86	1.68	1.36	1.81	1.42	1.25	1.11	0.42	1.63
	R ² / r	0.20/ 0.45	0.22/ 0.47	0.21/ 0.46	0.25/ 0.50	0.24/ 0.49	0.15/ 0.39	0.18/ 0.42	0.19/ 0.43	0.24/ 0.49
	P value	0.13	0.10	0.12	0.08	0.09	0.19	0.15	0.14	0.09
		Not Sig	Not Sig	Not Sig	Not Sig	Not Sig	Not Sig	Not Sig	Not Sig	Not Sig
Telehealth (Specialist)	Slope	-0.88	-0.43	-0.56	-0.96	-0.64	-0.86	-0.69	-0.03	-0.67
	R ² / r	0.24/ -0.49	0.03/ -0.16	0.24/ -0.49	0.25/ -0.50	0.23/ -0.48	0.30/ -0.55	0.28/ -0.53	0.02/ -0.14	0.17/ -0.41
	P value	0.09	0.59	0.09	0.08	0.10	0.05	0.06	0.65	0.16
		Not Sig	Not Sig	Not Sig	Not Sig	Not Sig	Not Sig	Not Sig	Not Sig	Not Sig

FIGURE 3: GRAPH OF TOTAL COUNT OF IN-PERSON AND TELEHEALTH ITEM CODES BY CATEGORY



DISCUSSION

This was the first study that analysed the usage of all medical practitioner telehealth MBS item codes in Australia. In general, there was increased telehealth item code utilisation from March 2020 to April 2020 with decreased in-person item code utilisation during the same period. Telehealth item code usage then decreased while in-person increased from April 2020 to March 2021. During the study period, there was a non-significant increase in in-person utilisation and a non-significant decrease in telehealth utilisation.

The decreased usage of in-person services during March 2020 to April 2020 correlates to the period when movement restrictions were first imposed across Australia. [21] Although people could still travel to obtain goods and services for health or medical purposes, there likely would have been hesitancy to travel due to the risk of contracting COVID-19.²² Hence, patients may have used telehealth to safely access healthcare to minimise this risk. This could explain why there was increased usage of telehealth item codes during this period. This increased usage of telehealth

during the pandemic was observed throughout Australia with one tertiary hospital having a 2255% increase in telehealth utilisation within 6 weeks. Worldwide, telehealth usage also increased.²³ Once lockdowns began to ease it seems that patients were more likely to visit their healthcare practitioner in-person as in-person usage increased from April 2020 to March 2021 and telehealth usage decreased during the same period. In Victoria specifically, telehealth had increased utilisation from March 2020 to August 2020 while in-person utilisation decreased during the same period. This was likely due to the increased period and frequency in which Victoria faced restrictions compared to the other states. [21] Tasmania was the only state that had a statistically significant decrease in telehealth usage and this may be due to the relatively low numbers of COVID-19 that Tasmania experienced.²⁴ Previous studies analysing telehealth item code usage in Australia have noted that there was a statistically significant increased usage of telehealth mental health services with video conferencing accounting for the majority of the services rendered. However, telephone consults still represented approximately one third of the telehealth appointments delivered.[25]

The increased telehealth usage could also be attributed to patient preference. Previous studies have found that patients do prefer telehealth with one study showing a 94-100% satisfaction rate. [26, 27] Additionally, the Australian Health Consumer Sentiment Survey reported that the Australian population had a high satisfaction rate for telehealth indicating that patients were accepting of telehealth as a healthcare delivery method. Over half of the survey participants perceived the quality of telehealth to be similar to face-to-face and an additional 17.1% believed telehealth was actually better.²⁸ The preference for telehealth could be due to increased accessibility especially for those living in rural or remote communities as well as telehealth reducing the risk of transmission of COVID-19 during the pandemic. [29, 30] However, the literature does note that telehealth may be perceived to be impersonal as the clinician is not physically present and complaints have been made that clinicians spend more time looking at screens than their patients. [31, 32] Further studies will be required to further analyse this within the Australian population.

However, it was interesting to note that during the study period, the usage of face-to-face item codes did not see a large increase or decrease relative to telehealth item codes, though there was slight fluctuation. This could have been due to the fact that even though movement was restricted, patients would still be able to access health care in-person if they required.³³ Additionally, patients were only eligible for telehealth through their regular medical practitioner whom they had visited face-to-face within the previous 12 months.¹⁴ This would mean that if patients wished to access telehealth services, they would require a face-to-face visit first which could explain the continued usage of face-to-face item codes during the study period. In April 2020, telehealth services no longer required bulk billing for patients who were not concession card holders, children or vulnerable patients to COVID-19. Additional changes were made in October 2020 as these criteria were completely removed and telehealth no longer required bulk billing for any patients.¹⁴ This could affect the perceptions of patients as they may perceive a telehealth appointment to be of less value compared to face-to-face appointments. This could possibly attribute to the continued usage of face-to-face item codes during the pandemic as well.

There are several limitations in this study. The data from MSD is aggregate data. This means that we are unable to

distinguish between services provided by doctors in public or private hospitals or between services that qualify for cover under the Department of Veterans' affairs or through Work Cover of the Transport Accident commission. Regardless, this study also provided the most to date description on the utilization of telehealth across different areas of healthcare. Additionally, the experience levels of the providers are not listed and the location of the patients is not disclosed to protect their privacy. This makes it difficult to analyse the pattern of usage based on these traits. While this data was previously available through a 10% random sample, issues arose with the privacy and hence it was removed following recommendations from a Senate Select Committee.³⁴ The data provided on the MSD does not differentiate between different types of providers within the categories. For example, the specialist category does not distinguish between consultant physicians, psychiatrists, paediatricians, or geriatricians, hence comparisons between specific specialists within the category were not possible. This is a gap that may be explored in future studies. The OMFS MBS item code used in this study was a separate category of OMFS to allow OMFS who only had a single dental qualification to access the MBS item codes. Since November 2004, no further clinicians were approved to use codes in this category and were instead instructed to use codes in other categories.³⁵ Hence the OMFS used in this study was only a selective group of OMFS who were approved to use these codes prior to November 1 2004, and not a true representation of current OMFS. However, the utilisation of the OMFS clinicians would be included in other codes and hence OMFS usage patterns were captured. Therefore, the effect of this limitation is not significant.

As the telehealth item codes were only introduced in 2020, only 12 months of data was available when this study was conducted meaning a long-term analysis was unable to be undertaken. Nevertheless, this longitudinal study is comprehensive due to the short timeframe in which the codes were introduced. This study examined telehealth delivered through the MBS in the public system. Telehealth is also provided by HCPs through private healthcare, the rebates for which are provided by private health insurers,¹¹ however we were unable to get access to this data. Therefore, only telehealth provided in the public health system were analysed for this study. Since most telehealth in Australia is provided through the public health sector through Medicare, [12] we do not expect this limitation will have a significant effect on our results.

Future studies should focus on gathering MBS data for a longer period to identify long term utilisation patterns and increase generalisability. Furthermore, if private health insurance data regarding telehealth can be obtained, it would enable a more wholistic analysis for greater generalisation.

CONCLUSION

Telehealth was more freely accessible during the COVID-19 pandemic in response to lockdown restrictions. Prior to 13 March 2020 telehealth was only accessible to those living in remote and regional areas and for those living in regions affected by natural disasters. There was increased utilisation of telehealth during the pandemic with a large increase between March 2020 and April 2020 followed by a decline in usage from April 2020 to March 2021. However, despite changes to telehealth eligibility criteria, telehealth item codes continued to be used even when lockdowns were eased. This indicates that patients are accepting of telehealth as a healthcare delivery method. Telehealth has become an integral part of our healthcare system allowing for greater access to medical services. The Australian government has provided additional funding for ongoing MBS telehealth services and hence telehealth will continue to play a large role in the future. Further studies should be conducted to analyse utilisation patterns of telehealth in the MBS so that funding can be effectively allocated to maximise the benefit. This study has analysed utilisation patterns for one year however longer-term studies are required to analyse the longer-term trends of telehealth usage in Australia.

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List of Abbreviations

ACT – Australian Capital Territory
COVID-19 – Coronavirus Disease 2019
GP – General Practitioner
HCP – Health Care Professionals
NSW – New South Wales
OMFS – Oral and Maxillofacial Surgeon
QLD – Queensland
MBS – Medicare Benefits Schedule
MSD – Medicare Statistics Database
NT – Northern Territory
QLD – Queensland
SA – South Australia
TAS – Tasmania
VIC – Victoria
WA – Western Australia