


# The impact of COVID-19 on consultations at an Aboriginal and Torres Strait Islander primary health care service: a retrospective observational study

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**M**edicare Benefit Schedule (MBS) telehealth items were welcome additions that supported general practice care during the coronavirus disease 2019 (COVID-19) pandemic. They were particularly valuable for the safety of primary care for Aboriginal and Torres Strait Islander people, at increased risk of COVID-19 infection, hospitalisation, and death because of the effects of socio-economic disadvantage, colonisation, and racism.<sup>1</sup> During the pandemic, the Southern Queensland Centre of Excellence in Aboriginal and Torres Strait Islander Primary Health Care (the Inala Indigenous Health Service) offered telehealth alongside face-to-face consultations. We have assessed whether the introduction of telehealth services affected accessibility to care at the Inala Indigenous Health Service.

We extracted Medicare and demographic data from the Inala Indigenous Health Service clinical database (Best Practice) for all people who attended the service during 1 March 2019

– 28 February 2021. We summarise data for billed MBS items (Supporting Information) as descriptive statistics. Confidence intervals for changes in rates were assumed to have a Poisson distribution, and were calculated in Stata 17.0. The Metro South Human Research Ethics Committee (HREC/2021/QMS/75200) and the Inala Community Jury for Aboriginal and Torres Strait Islander Health Research<sup>2</sup> approved the study.

The total number of MBS items claimed during the first twelve months of the COVID-19 pandemic was 3.3% lower (95% confidence interval [CI], –4.6% to –1.8%) and the total rebate amount received 8.3% lower (95% CI, –8.5% to –8.1%) than during the preceding twelve months. Of 35743 MBS items billed during the COVID-19 period, 6545 (18%) were for telehealth consultations, including 6027 (92%) billed by general practitioners. The number of MBS items billed by practice nurses or Aboriginal Health Workers was 24.8% (95% CI, –27.0% to –20.5%) lower during the pandemic period; all but five of 3713 consultations were face to

**1 Medicare Benefits Schedule (MBS) items billed at the Inala Indigenous Health Service, Brisbane, 1 March 2019 – 29 February 2020 (pre-pandemic period) and 1 March 2020 – 28 February 2021 (first year of the COVID-19 pandemic in Australia)**

Characteristic	1 Mar 2019 – 29 Feb 2020		1 Mar 2020 – 28 Feb 2021		
	Total	Total	Proportional change (95% CI)	Telehealth	Face-to-face
All MBS items	36 918	35 743	–3.3% (–4.6% to –1.8%)	6545 (18%)	29 198 (82%)
Total MBS rebate amount	\$1 776 756	\$1 629 766	–8.3% (–8.5% to –8.1%)	\$316 189 (19%)	\$1 313 577 (81%)
<b>Medical practitioner</b>					
General practitioner	30 299	29 869	–1.4% (–3.0% to +0.2%)	6027 (20%)	23 842 (80%)
Practice nurse and Aboriginal health worker	4871	3713	–24.8% (–27.0% to –20.5%)	5 (< 1%)	3708 (100%)
Medical specialist	947	1144	+20.8% (+10.4% to +31.2%)	250 (22%)	894 (78%)
Allied health practitioner	549	593	+8.0% (–4.5% to +20.6%)	249 (42%)	344 (58%)
Doctors in training	252	424	+68.3% (+42.0% to +94.5%)	14 (3%)	410 (97%)
<b>Patients</b>					
<b>Gender</b>					
Women	20 831	20 801	–0.1% (–2.1% to +1.8%)	4117 (20%)	16 684 (80%)
Men	15 055	14 026	–6.8% (–9.0% to –4.7%)	2241 (16%)	11 785 (84%)
<b>Age (years)</b>					
0–9	5455	4297	–21.2% (–24.4% to –18.1%)	431 (10%)	3866 (90%)
10–19	3569	3373	–5.5% (–9.9% to –1.0%)	471 (14%)	2902 (86%)
20–29	4321	4232	–2.1% (–6.2% to +2.1%)	902 (21%)	3330 (79%)
30–39	4015	3811	–5.1% (–9.3% to –0.9%)	850 (22%)	2961 (78%)
40–49	5198	4634	–10.9% (–14.4% to –7.3%)	955 (21%)	3679 (79%)
50 or older	14 360	15 396	+7.2% (+4.8% to +9.7%)	2936 (19%)	12 460 (81%)

CI = confidence interval; COVID-19 = coronavirus disease 2019. ♦

## 2 Medicare Benefits Schedule (MBS) items billed by general practitioners at the Inala Indigenous Health Service, Brisbane, 1 March 2019 – 29 February 2020 (pre-pandemic period) and 1 March 2020 – 28 February 2020 (first year of the COVID-19 pandemic in Australia)

Characteristic	1 Mar 2019 – 29 Feb 2020		1 Mar 2020 – 28 Feb 2021		
	Total	Total	Proportional change (95% CI)	Telehealth	Face-to-face
Total MBS rebate amount	\$1481121	\$1331195	-10.1% (-10.3% to -9.9%)	\$274 332 (21%)	\$1 056 863 (79%)
Total scheduled patient appointment hours	7610	8934	+17.4% (+13.8% to +21.0%)	1799 (20%)	7135 (80%)
MBS items billed per appointment hour, mean	3.98	3.34	-17.5% (-20.5% to -14.4%)	3.35	3.34
MBS rebate per appointment hour, mean	\$195	\$149	-26.7% (-29.8% to -23.7%)	\$153	\$148
Consultation characteristics					
Patient had a clear problem	315	871	+176% (+141% to +212%)	626 (72%)	245 (28%)
Less than 20 minutes	6493	8243	+27.0% (+22.8% to +31.1%)	4085 (50%)	4158 (50%)
At least 20 minutes	5731	4087	-28.7% (-31.5% to -25.8%)	707 (17%)	3380 (83%)
At least 40 minutes	990	935	-5.6% (-14.0% to +2.9%)	33 (4%)	902 (96%)
Indigenous health assessment	1256	961	-23.5% (-29.9% to -17.1%)	5 (1%)	956 (99%)
General practitioner management plan	512	512	0.0% (-12.2% to +12.2%)	97 (19%)	415 (81%)
Coordination of team care arrangements	229	238	+3.9% (-14.9% to +22.8%)	41 (17%)	197 (83%)
Mental health treatment consultation or care plan	442	397	-10.2% (-22.4% to +2.0%)	71 (18%)	326 (82%)

CI = confidence interval; COVID-19 = coronavirus disease 2019. ◆

face. The number of MBS items for female patients were similar in both years, but 6.8% lower (95% CI, -9.0% to -4.7%) for male patients and 21.2% lower (95% CI, -24.4% to -18.1%) for children under ten years of age during first twelve months of the COVID-19 period (Box 1). Video conferencing was used for 210 telehealth consultations (3% of all telehealth consultations).

The total general practitioner rebate amount received was 10.1% lower (95% CI, -10.3% to -9.9%) during the first year of the pandemic than during the preceding year, but the number of scheduled appointment hours was 17.4% higher (95% CI, +13.8% to +21.0%). Of 6027 general practitioner telehealth consultations, 4085 (68%) were less than 20 minutes in length. The numbers of all consultations longer than 20 minutes (-28.7%; 95% CI, -31.5% to -25.8%) and of Indigenous health assessments (-23.5%; 95% CI, -29.9% to -17.1%) were lower during the pandemic period. The number of mental health-related consultations was also lower, but the change was not statistically significant (-10.2%; 95% CI, -22.4% to +2.0%) (Box 2).

General practitioners at the Inala Indigenous Health Service billed a larger number of MBS items but received less in rebates during the first year of the pandemic than in the preceding year. However, our study in a single service may not reflect the experience of all Indigenous health services. For example, MBS rebates for a regional Victorian Aboriginal Medical Service increased by \$128929 (17%) during the pandemic; 44% of consultations were telehealth consultations (1225 consultations in 87 days),<sup>3</sup> a larger proportion than in our study (18%; 6545 in 365 days). The generally short length of telehealth consultations

led to a higher rebate-to-time ratio for general practitioner appointments. At the Inala Indigenous Health Service, the availability of telehealth consultations did not avert sizeable reductions in the numbers of long consultations, Indigenous health assessments, and practice nurse and Aboriginal health worker consultations during the first year of the pandemic, consistent with concerns about reduced preventive and mental health care in primary care at this time.<sup>4</sup>

Telehealth consultations were a good approach to improving access to primary care during the COVID-19 pandemic. However, the number of consultations with practice nurses and Aboriginal health workers at the Inala Indigenous Health Service was lower during than before the pandemic, as were the numbers of primary care visits for men, young children, and people seeking preventive health care.

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### Supporting Information

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