

# **ISSUE1 2 December 2020**

Since its identification in December 2019, severe acute respiratory syndrome coronavirus (SARS-CoV-2) and its associated coronavirus disease (COVID-19) has had a devastating effect on communities around the world. Health systems have been forced to make rapid choices about how to prioritise care, manage infection control and maintain reserve capacity for future disease outbreaks. The interruption of normal patterns of health care and the suspension of services has meant that the pandemic has also had a major impact on the detection and treatment of many non-COVID-19 conditions. Electronic general practice data are a valuable resource which can be used to inform population and individual care decision-making.

This project is based on a collaborative relationship involving the Digital Health Cooperative Research Centre, Macquarie University, Outcome Health, Gippsland, Eastern Melbourne and South Eastern Melbourne Primary Health Networks (PHNs), and the Royal College of Pathologists of Australasia Quality Assurance Programs, with participation from Central and Eastern Sydney and South Western Sydney PHNs. It will use an innovative secure and comprehensive digital health platform, Population Level Analysis & Reporting (POLAR) to:

- Generate near real-time reports to identify emerging trends related to COVID-19, its diagnosis, treatment and medications prescribed, and its impact on patients.
- Monitor the impact of interventions/policy decisions.

# The uptake of GP telehealth services during the COVID-19 pandemic

## INTRODUCTION

While the onset of the COVID-19 pandemic was met with expert advice to stay at home and socially distance, there was also reassurance from the Commonwealth Department of Health<sup>1</sup> that attending medical appointments was safe. Despite this advice, general practices were severely impacted by an initial drop in face-to-face visits. Between 13 and 30 March 2020, the Australian Government Department of Health progressively released a list of temporary Medicare Benefits Scheme (MBS) Telehealth Services item numbers<sup>2</sup> to cover general practice payments for out-ofhospital patients, with the aim to cover this gap in face-to-face visits and reduce risk of community transmission of COVID-19.

While telehealth has previously been used in select populations such as rural<sup>3</sup> or remote communities<sup>4, 5</sup> or specialist care<sup>6</sup>, the onset of COVID-19 has prompted a rapid scaling up of telehealth services in areas where it has not previously been commonplace - including general practice. For the purposes of this analysis, we used the International Organisation for Standardisation definition of Telehealth<sup>7</sup> which includes the use of telecommunication technology including both voice/audio (telephone) and video.

The aim of this snapshot is to determine the uptake of telehealth services compared to face-to-face visits, including video and phone consultations, before and after the rapid introduction of the new MBS Telehealth Services item numbers.

## METHODS

The study population covers nearly 30% of the Australian population, including urban and rural/remote regions from approximately 800 general practices (454 from Victoria and 346 from NSW). The participating Primary Health Networks (PHNs) included two urban (Eastern Melbourne and South Eastern Melbourne) PHNs and a predominantly rural (Gippsland) PHN from Victoria, and Central and Eastern Sydney (urban) and South Western Sydney (incorporating rural areas Wingello to Bundanoon) PHNs from New South Wales.

In our analysis, we included MBS items claimed by general practitioners (GPs) for all professional attendance type items.<sup>2</sup> Professional attendance covers consultations during which a patient's health related issue(s) is evaluated, managed, and/or advised on. MBS items for face-to-face (F2F) and telehealth items for video (videoconference service) and telephone (audio-only service) encounters were included in the analysis. The analysis period covered from January 2019 to September 2020. For the utility of each service, we presented this as median visits as well as proportions on a weekly basis. The proportion is calculated as weekly encounters of F2F/video/telephone MBS items divided by the total claims within each state for the period January to September 2020.

Outcome Health, as a data custodian, provides a secure and comprehensive digital health platform which collects data from the consenting general practices across the above mentioned PHNs. Ethics approval for the project has been approved by Macquarie University Human Research Ethics Committee (52020675617176). Ethics to collect and use general practice data has been obtained by the data custodians, granted by the RACGP ethics committee.<sup>8</sup>

#### RESULTS

**Victorian PHNs:** The median (interquartile range) number of patients who received a consultation per week was 192,516 (182,014-196,895) in 2019 and 202,528 (192,391-213,516) in 2020.

#### 2 COVID-19 GENERAL PRACTICE SNAPSHOT

There were 202,624 (191,221-207,487) F2F consultation claims, 38 (33-45) video claims, and zero telephone consultation claims in 2019, per week. In 2020, 140,485 (104,390-189,121) F2F claims, 2,540 (66-3,114) video consultation claims, and 95,357 (72,404-119,635) telephone consultation claims per week occurred.

**NSW PHNs:** The median (interquartile range) number of patients who received a consultation was 131,752 (128,048-134,884) in 2019 and 134,747 (129,614-141,083) in 2020, per week. There were 141,297 (137,072-144,617) F2F consultation claims, 4 (2-6) video consultation claims, and zero telephone consultation claims in 2019, per week. In 2020, 109,052 (104,049-131,907) F2F

Victoria (EMPHN, SEMPHN, GPHN)

consultation claims, 805 (8-1,398) video consultation claims, and 42,850 (35,675-46,140) telephone consultation claims occurred, per week.

Between 2019 and 2020, the median of the proportion for F2F consultations was 95.7% and 57.7% for Victoria. Similarly, the median of the proportion for F2F consultations was 97.3% and 70.0%, respectively for NSW.

Since the introduction of new MBS items for video and telephone consultations, a decline in F2F consultations and an increase in video and telephone consultations occurred (Figures 1 and 2). These changes occurred on a larger scale in Victorian PHNs (Figure 1 (A) and Figure 2 (A)) than those in NSW (Figure 1(B) and Figure 2(B)).





**Figure 1:** Total professional attendance MBS claims: Weekly number of total MBS claimed items for face-to-face (F2F) consultations, video consultations, and telephone consultations (left y-axis) for (A) 3 Victorian PHNs and (B) 2 New South Wales (NSW) PHNs. New COVID-19 cases are indicated by purple bars (right y-axis).



**Figure 2:** Proportion of weekly total MBS claimed items for the PHNs in each state: (A) Victorian PHNs: Median face-to-face (F2F) consultation claims comprised 57.7% (range 35.7%-95.7%) of the weekly total MBS consultation claims; and, video consultation claims comprised 1.1% (range: <1%-1.7%) and telephone consultation claims comprised 37.8% (range: <1%-59.5%) of the weekly total MBS claims; (B) NSW PHNs: Median F2F consultation claims comprised 70.0% (range: 63.4%-97.8%) of the weekly total MBS claims; and, video consultation claims comprised 0.5% (range: <1%-1.6%) and telephone consultation claims comprised 26.9% (range: <1%-32.3%) of the weekly total MBS claims. Again, the utility of telehealth by video or phone consultation is greater in Victoria than in NSW among these PHNs.







MACQUARIE

OUTCOME HEALTH









## IMPLICATIONS

The shift from F2F visits to telehealth, including both video and phone consultations, after the implementation of the temporary MBS item numbers suggests that telehealth consultations have filled the gap left by the decrease in F2F visits.

In these PHNs, the drop in F2F consultations and uptake of telehealth by video or phone service is greater in Victoria than in NSW. At the height of Victoria's second wave in August, phone consultations even surpassed F2F as the primary consultation type in general practice. These differences reflect the differences in the reality of the COVID-19 pandemic situation between the states.

The uptake of phone consultations was substantially higher than the uptake of video consultations, suggesting that a limited use of video technology has been taken up in contrast to phone consultations, which were rapidly implemented into GPs' workflow.

This shift provides justification for extension of telehealth consultation item numbers by MBS, which have presently been extended to 31 March 2021. This will benefit:

- Patients: by providing continuity of care while allowing flexibility in appointment types and times, all the while reducing the risk of COVID-19 transmission during the COVID-19 period, and reduce burden of travel thereafter.
- General practice: by providing a safe working environment for general practice staff and ensuring that practice activity remains steady.
- PHNs: by ensuring equal opportunity and access to care for all residents within the PHN's practice catchment.

These results indicate that there are differences between the different consultation types over time. Next steps are to determine demographic differences in telehealth video and phone consultation use, including age, sex, socioeconomic status, and regionality.

## REFERENCES

1. Australian Government Department of Health. Accessing health services during coronavirus (COVID-19) restrictions. 2020; https://www.health.gov.au/news/health-alerts/novelcoronavirus-2019-ncov-health-alert/ongoing-support-duringcoronavirus-covid-19/accessing-health-services-duringcoronavirus-covid-19-restrictions. Accessed 30/10/2020.

2. Australian Government Department of Health. COVID-19 Temporary MBS Telehealth Services. 2020; http://www. mbsonline.gov.au/internet/mbsonline/publishing.nsf/Content/ Factsheet-TempBB. Accessed 09/10/2020.

3. Bradford NK, Caffery LJ, Smith AC. Telehealth services in rural and remote Australia: a systematic review of models of care and factors influencing success and sustainability. Rural Remote Health. 2016;16(4).

4. Clair MS, Murtagh DP, Kelly J, Cook J. Telehealth a game changer: closing the gap in remote Aboriginal communities. Med J Aust. 2019; 210 Suppl 6:S36-S37.

5. St Clair M, Murtagh D. Barriers to Telehealth Uptake in Rural, Regional, Remote Australia: What Can Be Done to Expand Telehealth Access in Remote Areas? Stud Health Technol Inform. 2019;266:174-182.

6. McPhee E. Telehealth: the general practice perspective. Aust Fam Physician.2014;43(12):826-827.

7. Australian Government Department of Health. Telehealth. 2020; https://www1.health.gov.au/internet/main/publishing.nsf/ Content/e-health-telehealth. Accessed 20/11/2020.

8. Pearce C, McLeod A, Rinehart N, Ferrigi J, Shearer M. What a Comprehensive, Integrated Data Strategy Looks Like: The Population Level Analysis and Reporting (POLAR) Program. Stud Health Technol Inform. 2019; 264:303-307.

Suggested citation: Hardie R-A, Sezgin G, Dai Z, Georgiou A. The uptake of GP telehealth services during the COVID-19 pandemic. COVID-19 General Practice Snapshot. Issue 1: 2 December 2020. Sydney: Macquarie University; 2020. https://doi.org/10.25949/C3HE-F430















CQUARIE