Impacts of COVID-19 on Medicare Benefits Scheme and Pharmaceutical Benefits Scheme service use

Web report | Last updated: **17 Dec 2020** | Topic: Health care quality & performance | Media release

About

The Australian Institute of Health and Welfare (AIHW) is releasing data and analysis on the impact of the COVID-19 pandemic on health and welfare issues relevant to Australians.

The COVID-19 pandemic has had an impact on both patients and health practitioners in terms of the number of medical services, type of services and the way in which services are delivered.

This report examines the impact of COVID-19 on the:

- Medicare Benefits Scheme (MBS) by presenting the number of MBS services and Government benefits paid; and
- Pharmaceutical Benefits Scheme (PBS) by presenting the number of prescriptions dispensed and Government benefits paid.

Cat. no: HPF 65

Findings from this report:

- There was a spike in PBS scripts dispensed in March 2020 with the volume of scripts 23% higher than in March 2019
- All medicine groups saw an increase in PBS script volume in March 2020, most significantly for respiratory medicines
- COVID-19 had little impact on overall PBS script volumes for 2020 versus 2019
- **Explore MBS and PBS quarterly data**

Summary

The COVID-19 pandemic has had a major impact on the ways in which people are accessing health services and also the ways in which health professionals are delivering services.

The following programs fall under Medicare, which is Australia's universal health care system:

- The Medicare Benefits Scheme (MBS) is the listing of healthcare services subsidised by the Australian Government.
- The Pharmaceutical Benefits Scheme (PBS): the Australian government subsidises the cost of a wide range of prescription medicines through 2 separate schemes, the PBS and the Repatriation Pharmaceutical Benefits Scheme (RPBS) for eligible veterans and their dependants.

These web reports focus primarily on health care service use and provide a brief overview of expenditure using Australian government benefits paid. These reports do not include other related payments for example from consumers, private health insurers, states/territories, etc.

Impact on MBS service use

On this page:

National measures in response to COVID-19 related to medical services

Since March 2020, the Australian Government implemented various temporary changes to support continued access to essential health care and to reduce the spread of COVID-19.

The temporary measures include:

- The temporary suspension of non-urgent elective surgeries effective from 26 March 2020. The Australian Government via the National Cabinet began a staged restoration of elective surgery from 28 April 2020.
- The introduction of new MBS telehealth items made available to reduce the risk of community transmission of COVID-19, and provide protection for patients and health care providers. These changes have resulted in Medicare benefits being made available for telephone and video conferencing consultations. Details can be viewed in the MBS Changes factsheet: COVID-19 Temporary MBS Telehealth Services.
- The temporary doubling of all Medicare bulk-billing incentive fees from 13 March 2021. This measure ceased as of 1 October 2020. Details can be viewed in the COVID-19 Bulk-billing incentives Frequently Asked Questions.

Impact of COVID-19 on MBS services and government benefits paid

In order to assess the impact of the COVID-19 pandemic on the Medicare Benefits Schedule (MBS), the AIHW has conducted a comparison of twenty-four months of MBS data, from September 2018 to August 2020. These data suggest that there have been a range of impacts on MBS activity associated with the COVID-19 pandemic, including:

- Both total services and total benefits in March 2020 were slightly higher than March 2019 (1.0% and 0.3% respectively).
- Following a rise in COVID-19 case numbers and the introduction of restrictions, including on elective surgery, total services and benefits paid in April 2020 declined by 10.2% and 7.8% respectively, compared with April 2019.
- By July 2020 both total services and total benefits paid had recovered and showed an increase of 6.6% on total service and 12.5% on total benefits paid compared with July 2019.

Figure 1.1: Total MBS services for all Broad Type of Service group, in-hospital and non-hospital, Australia, September 2018 to August 2020

This bar chart presents MBS summary statistics for hospital and non-hospital services, by month of processing, from September 2018 to August 2020. Depending on selection, statistics can be presented on number of services by broad type of service group, and by region within state/territory. A vertical reference line shows the suspension of elective non-urgent surgery on the 26th of March 2020.

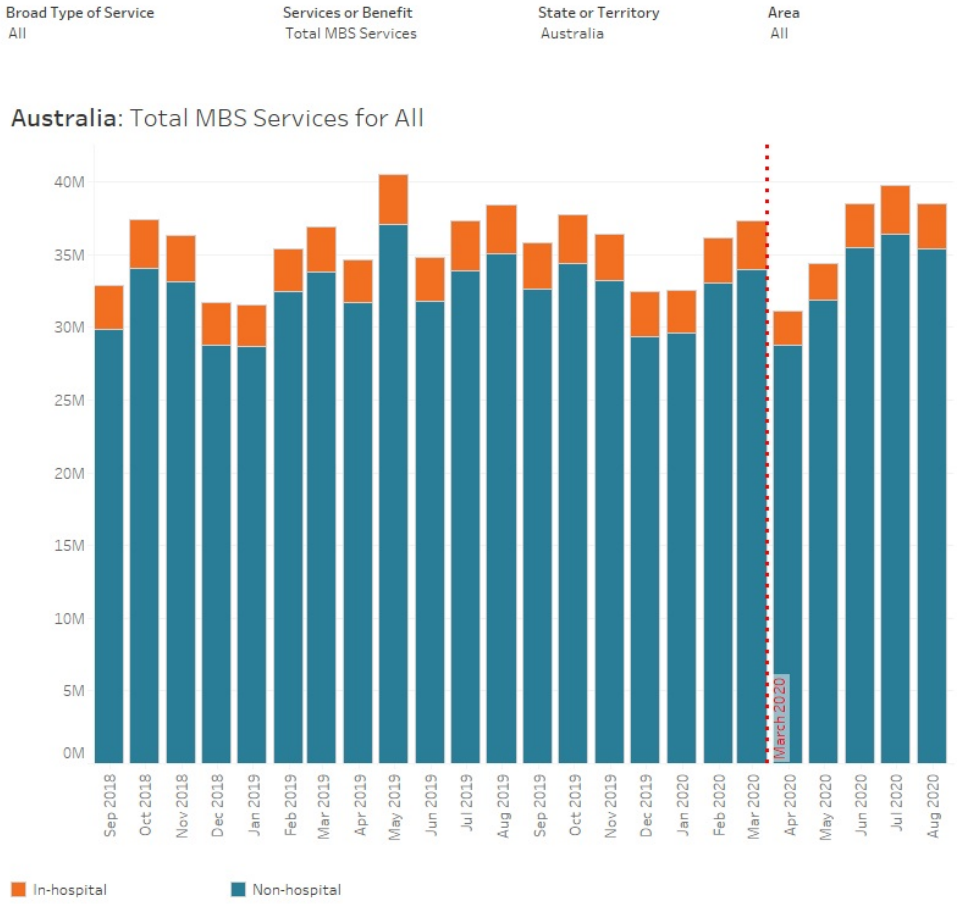
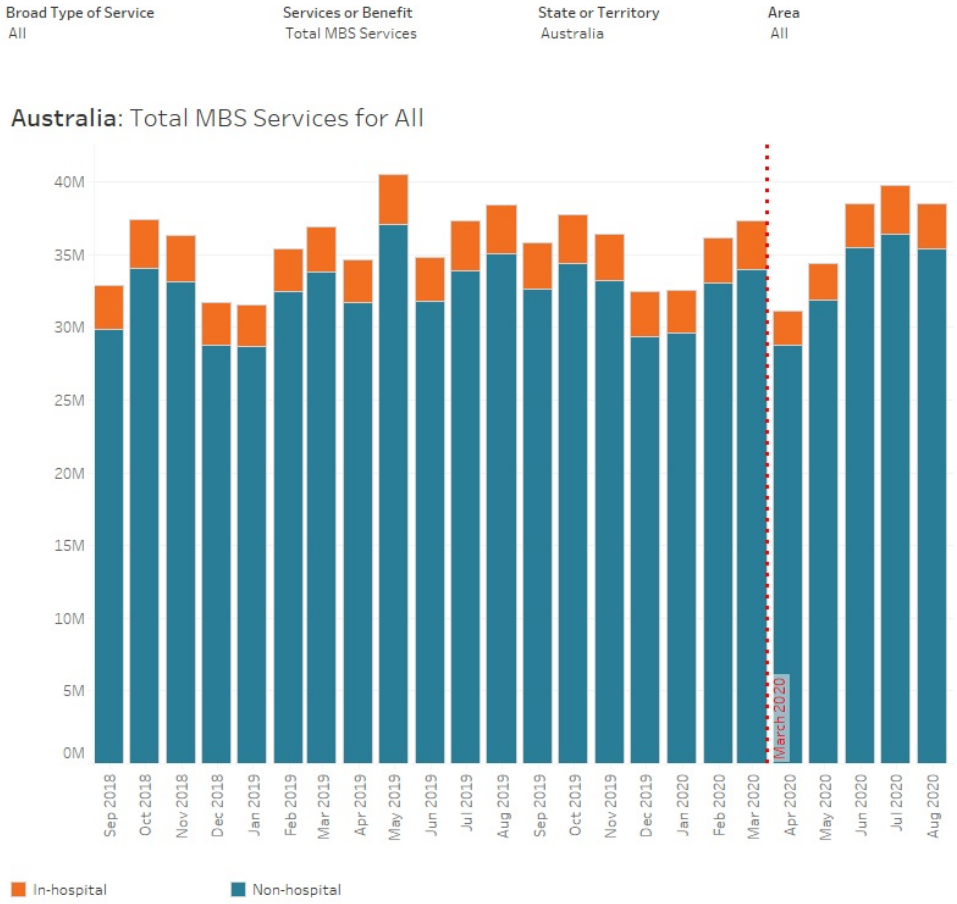


Figure 1.2: Total MBS benefits paid for all Broad Type of Service groups, in-hospital and non-hospital, Australia, September 2018 to August 2020

This bar chart presents MBS summary statistics for hospital and non-hospital services, by month of processing, from September 2018 to August 2020. Depending on selection, statistics can be presented on benefits paid by broad type of service group, and by region within state/territory. Suspension of elective non-urgent surgery was on the 26th of March 2020.



Source: AIHW analysis of MBS data maintained by the Australian Government Department of Health.
https://www.aihw.gov.au

In terms of the different types of services according to Broad Type Of Service (BTOS), total services for GP attendances increased while benefits paid decreased slightly in April 2020. Specialist attendances showed a decrease in April 2020 with a gradual recovery in the subsequent months. In particular, both services and benefits paid for specialist attendances, surgical operations, pathology and diagnostic imaging decreased in April 2020 compared with March 2020, and compared with April 2019, but recovered in May 2020 and were back to pre-pandemic levels by July 2020.

Optometry services experienced a decline (both services and benefits paid) in April 2020, when many optometry practices were closed.

Total services for the "Other MBS" group declined while benefits paid increased in April 2020 compared with March 2020, which was due to the increase in benefits for bulk-billing incentives for un-referred services.

Figure 1.3: Total MBS benefits paid for Other MBS, in-hospital and non-hospital, September 2018 to August 2020

This line chart presents MBS summary statistics for the Broad Type of Service group 'other MBS' for hospital and non-hospital services, by month of processing, from September 2018 to August 2020. Depending on selection, statistics can be presented on benefits paid by broad type of service group, and by region within state/territory. Suspension of elective non-urgent surgery was on the 26th of March 2020.

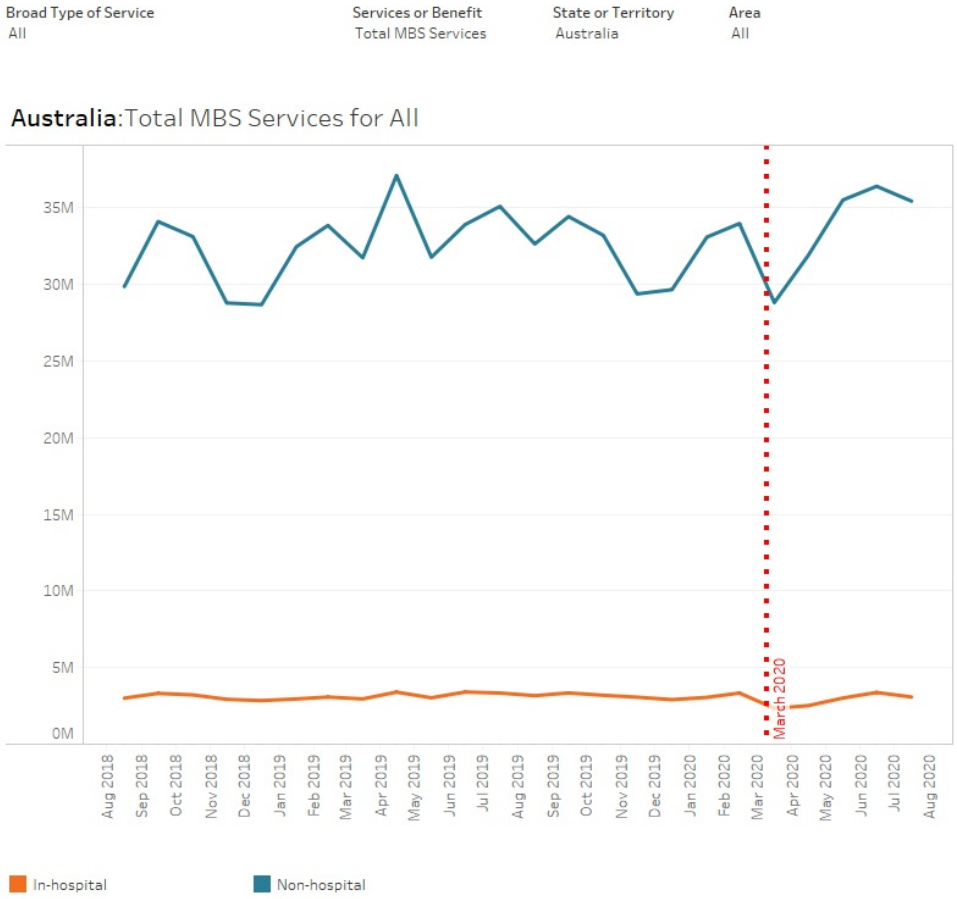
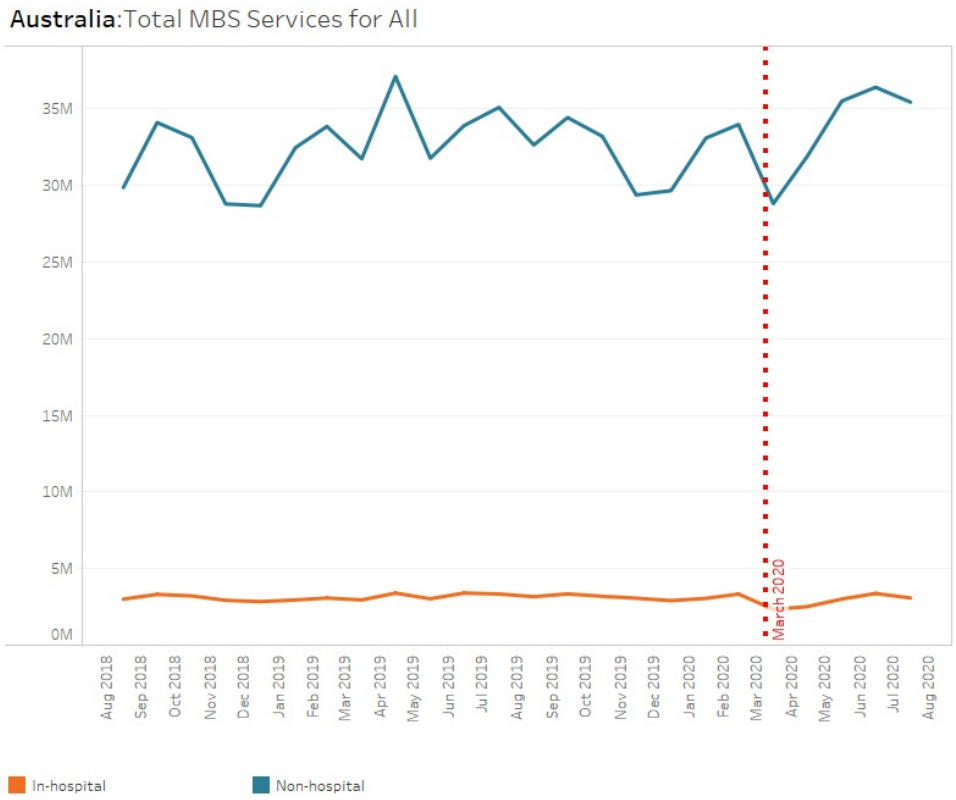


Figure 1.4: Total MBS benefits paid for Optometry services, in-hospital and non-hospital, Australia, September 2018 to August 2020

This line chart presents MBS summary statistics for the Broad Type of Service group 'optometry' for hospital and non-hospital services, by month of processing, from September 2018 to August 2020. Depending on selection, statistics can be presented on benefits paid by broad type of service group, and by region within state/territory. Suspension of elective non-urgent surgery was on the 26th of March 2020.

Broad Type of Service	Services or Benefit	State or Territory	Area
All	Total MBS Services	Australia	All



Source: AIHW analysis of MBS data maintained by the Australian Government Department of Health.
https://www.aihw.gov.au

Impact of COVID-19 on non-hospital MBS services

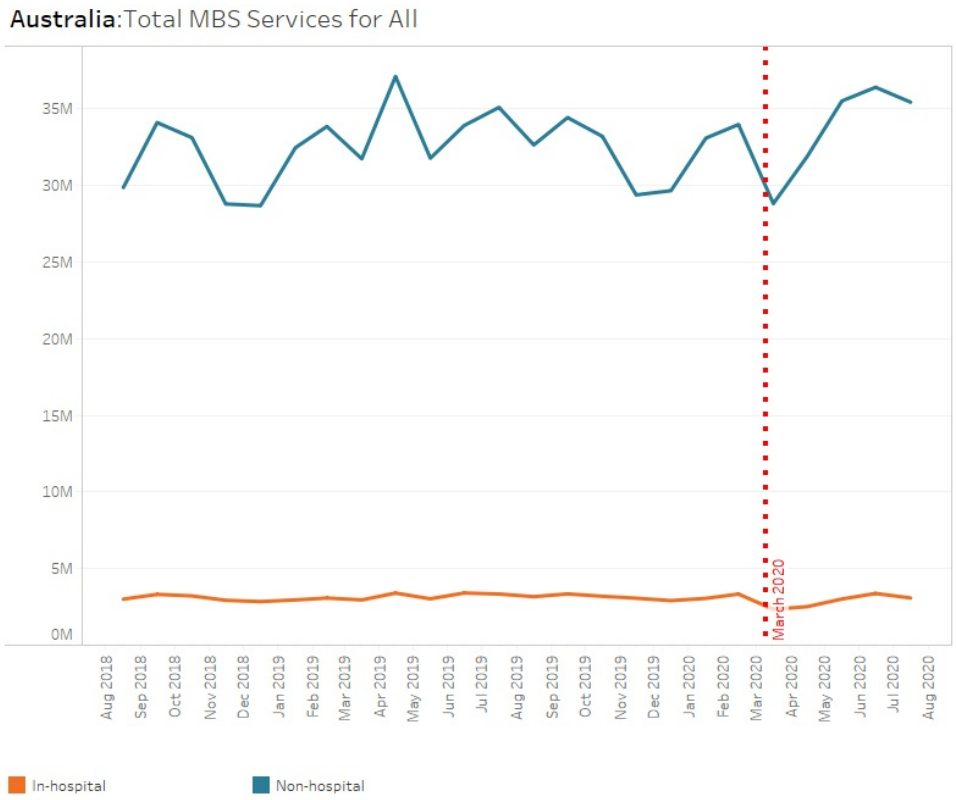
Nationally, there was a fall in the total number of out-of-hospital services from 34.0 million in March 2020 to 28.8 million in April 2020. The total number of services increased in July/August:

- For the BTOS group “Non-referred GP attendances”, the number of services remained stable between March and August nationally. This pattern was seen across all states and territories. For some service types the impact of the shutdown in response to the first wave of COVID-19 was more marked. This stable pattern was likely influenced by the introduction of new telehealth and telephone items into the MBS in March 2020.
- For “Specialist attendances”, “Pathology”, “Diagnostic imaging” and “Optometry” services and benefits paid decreased in April 2020 compared with March 2020, and compared with April 2019, but recovered in May 2020 and were back to pre-pandemic levels by July 2020.
- “Other MBS” had a decline in services in April 2020 but total benefits increased in benefits increased due to bulk-billing incentives "Un-referred" services.

Figure 1.5: Total MBS services for Pathology services, in-hospital and non-hospital, Australia, September 2018 to August 2020

This line chart presents MBS summary statistics for the Broad Type of Service group ‘pathology’ for hospital and non-hospital services, by month of processing, from September 2018 to August 2020. Depending on selection, statistics can be presented on benefits paid by broad type of service group, and by region within state/territory. Suspension of elective non-urgent surgery was on the 26th of March 2020.

Broad Type of Service	Services or Benefit	State or Territory	Area
All	Total MBS Services	Australia	All



Source: AIHW analysis of MBS data maintained by the Australian Government Department of Health.
https://www.aihw.gov.au

Impact of COVID-19 on in-hospital MBS services (private admitted patients and hospital substitute)

In response to the COVID-19 pandemic, restrictions were placed on elective surgery from March 2020. The data presented here mainly relates to MBS-subsidised services provided to private patients in private and public hospitals. Public patients in public hospitals are not covered by the MBS.

Nationally, there was a drop in the total number of in-hospital MBS services and benefits paid:

- Total in-hospital benefits paid in March 2020 ($276m) were higher than March 2019 ($262m) but in-hospital benefits paid in April 2020 ($185m) was lower than March 2020 and April 2019 ($243m).
- Total for in-hospital services in March 2020 (3.3m) was slightly higher than March 2019 (3.1m) but the number of services in April 2020 (2.3m) was lower than April 2019 (3.0m).

Following the easing restrictions on elective surgery, both services and benefits have bounced back to pre-pandemic levels in July/August.

Additional data relating to surgeries provided via state/territory governments can be found within the elective surgery resource.

Figure 1.6: Total MBS services by Broad Type of Service groups, in-hospital and non-hospital, September 2018 to August 2020

This line chart presents MBS summary statistics for hospital and non-hospital services, by month of processing, from September 2018 to August 2020. Depending on selection, statistics can be presented on number of services by broad type of service group, and by region within state/territory. A vertical reference line shows the suspension of elective non-urgent surgery on the 26th of March 2020.

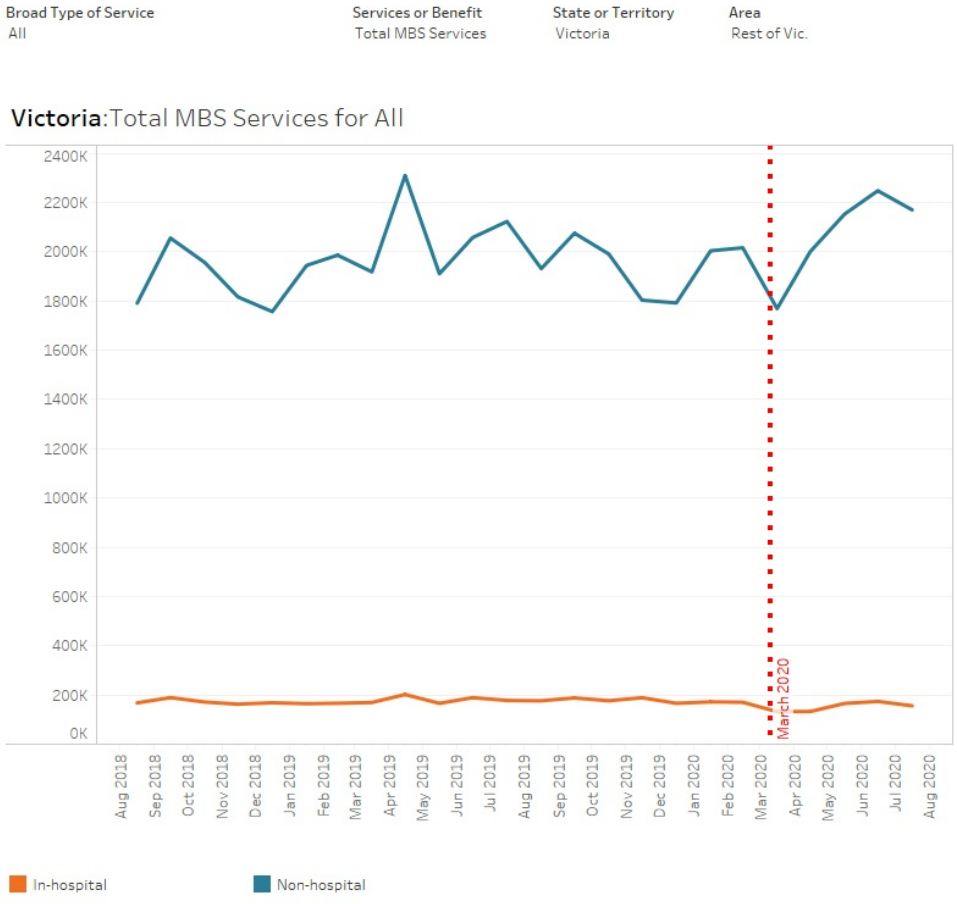
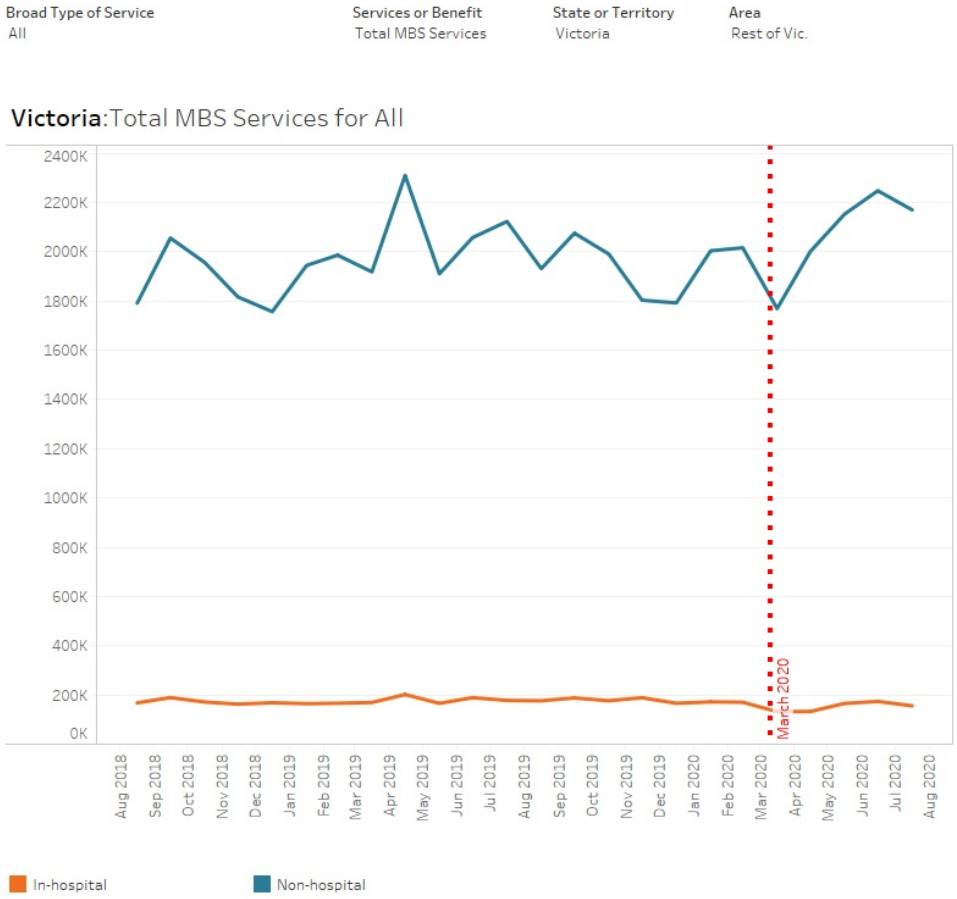


Figure 1.7: Total MBS benefits paid for all Broad Type of Service groups, in-hospital and non-hospital, September 2018 to August 2020

This line chart presents MBS summary statistics for hospital and non-hospital services, by month of processing, from September 2018 to August 2020. Depending on selection, statistics can be presented on benefits paid by broad type of service group, and by region within state/territory. A vertical reference line shows the suspension of elective non-urgent surgery on the 26th of March 2020.



Source: AIHW analysis of MBS data maintained by the Australian Government Department of Health.
https://www.aihw.gov.au

The decrease in services and benefits paid in April 2020 reflect the decrease in certain service types such as specialist attendances and surgical operations. The following months experienced growth in services and benefits, except in Victoria where there was a fall in August likely associated with their second wave of COVID-19.

Figure 1.8: Total MBS benefits paid for Specialist Attendances, in-hospital and non-hospital, September 2018 to August 2020

This line chart presents MBS summary statistics for the Broad Type of Service group 'specialist attendances' for hospital and non-hospital services, by month of processing, from September 2018 to August 2020. Depending on selection, statistics can be presented on benefits paid by broad type of service group, and by region within state/territory. Suspension of elective non-urgent surgery was on the 26th of March 2020.

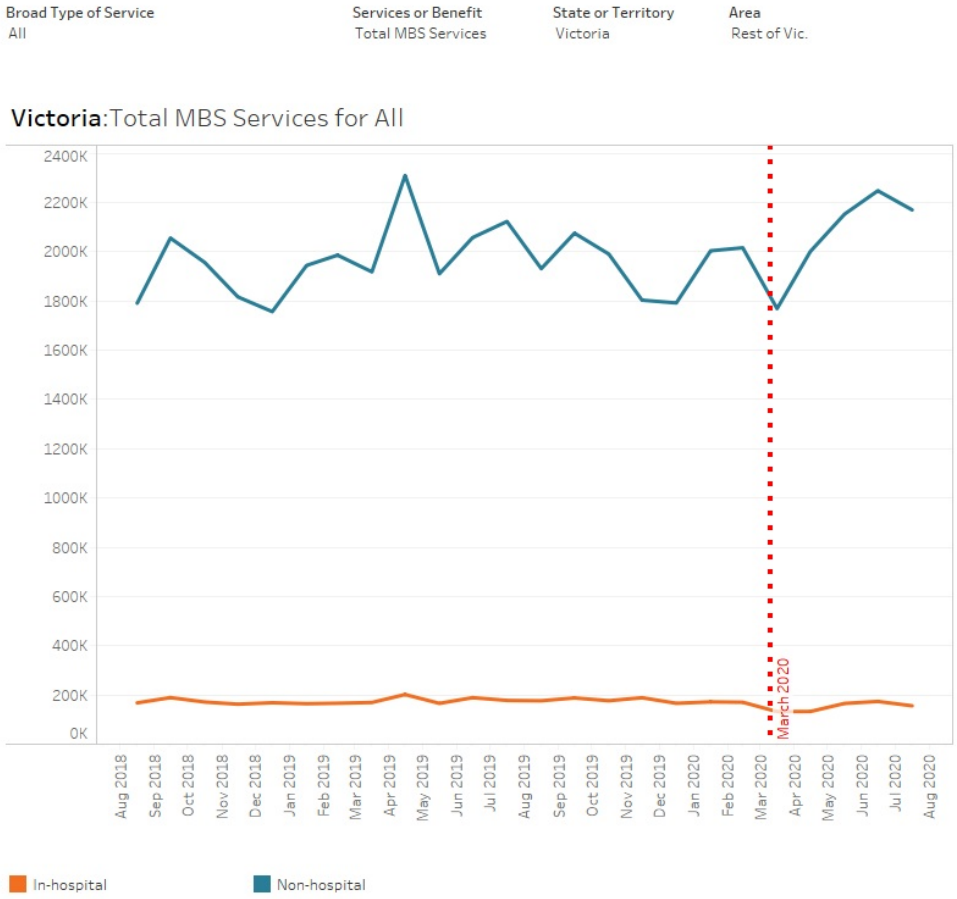
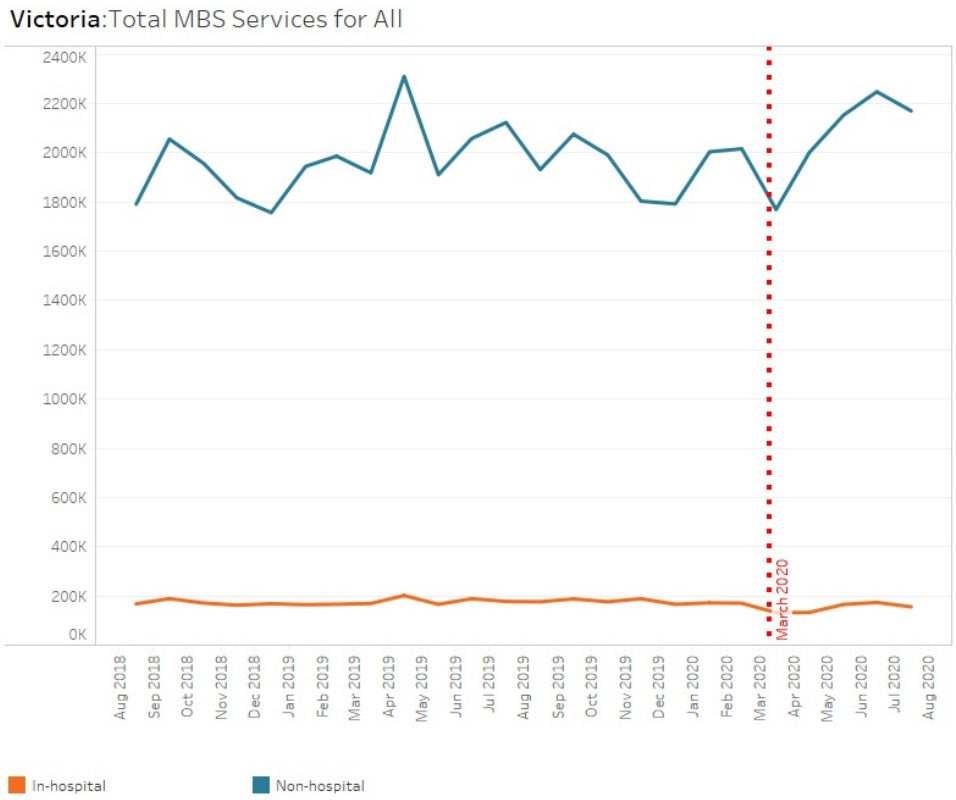


Figure 1.9: Total MBS benefits paid for Operations, in-hospital and non-hospital, September 2018 to August 2020

This line chart presents MBS summary statistics for the Broad Type of Service group 'operations' for hospital and non-hospital services, by month of processing, from September 2018 to August 2020. Depending on selection, statistics can be presented on benefits paid by broad type of service group, and by region within state/territory. Suspension of elective non-urgent surgery was on the 26th of March 2020.

Broad Type of Service: All | Services or Benefit: Total MBS Services | State or Territory: Victoria | Area: Rest of Vic.



Source: AIHW analysis of MBS data maintained by the Australian Government Department of Health.
https://www.aihw.gov.au

Utilisation of COVID-19 related MBS telehealth items

In response to the COVID-19 pandemic, from March 2020 the Australian Government introduced a range of temporary telehealth items in the MBS which allowed general practitioners (GPs), medical specialists, obstetrics and allied health professionals to also provide consultations either by telephone or videoconference. These changes were intended to reduce the risk of community transmission of COVID-19 and provide protection for both patients and health care providers.

This section of the report only focuses on the MBS items in the COVID-19 Temporary MBS Telehealth Services. The temporary MBS telehealth services items in the circular are separated into three categories, face-to-face items, telehealth items via video-conference, and telephone items for when video-conferencing is not available. The face-to-face items are pre-existing items. The telephone items and video-conference items were introduced in March 2020 in response to the COVID-19 pandemic and these items are different from those pre-existing telehealth items in the MBS.

Compared here are those service types where temporary tele-items were added alongside existing items in the MBS. As such, the categories presented are not directly comparable with the BTOS category presented earlier in this web report.

Between March and August 2020, telephone consultations by all health professionals constituted over one quarter (26%) of all telehealth items introduced in response to COVID-19 as well as the face to face equivalent items. During the same period, less than three-quarters (72%) of all services were delivered face-to-face, and 2% were delivered via video-conference.

There was some variability across different health professional groups. Please see the percentage distribution between COVID-19 related items in Table 1.

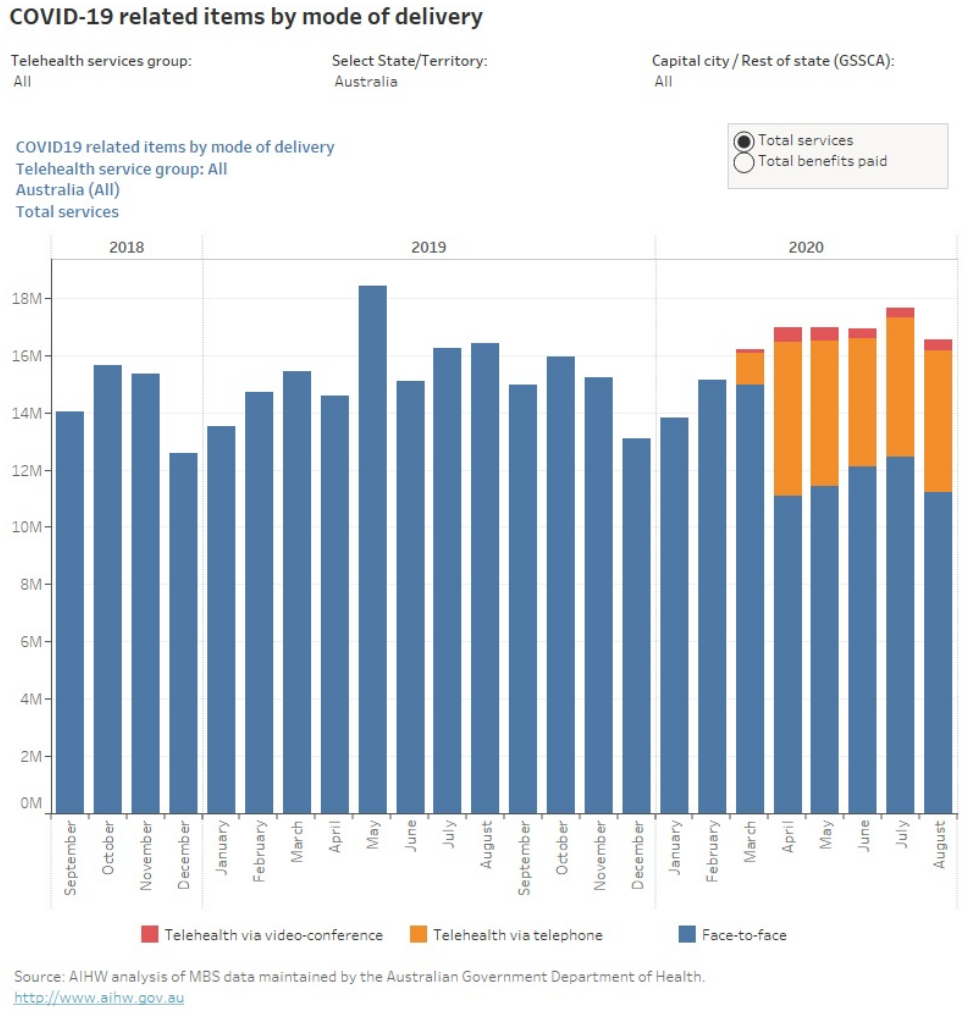
Table 1. Percentage of services, COVID-19 related MBS items, by mode of delivery, March to August 2020

Attendance Type	Face-to-face	Telephone	Video-conference
GP	70%	29%	1%
Other medical practitioner	74%	25%	1%
Specialist	78%	18%	4%
Obstetrics	89%	9%	2%
Allied health	81%	9%	10%

The change in mode of delivery was most pronounced in April 2020. While the total number of consultations increased by 16% when compared to April 2019, face-to-face consultations decreased, dropping 24% when compared to April 2019. This decrease in face-to-face consultations was offset by a large volume of consultations delivered via telephone and video-conference.

Figure 1.10: Total MBS services and benefits paid for COVID-19 related items by mode of delivery, September 2018 to August 2020

This bar chart presents the number of services and benefits paid for COVID-19 related items by mode of delivery (face-to-face, telehealth consultation via telephone, and telehealth consultation via video-conference) from September 2018 to August 2020.



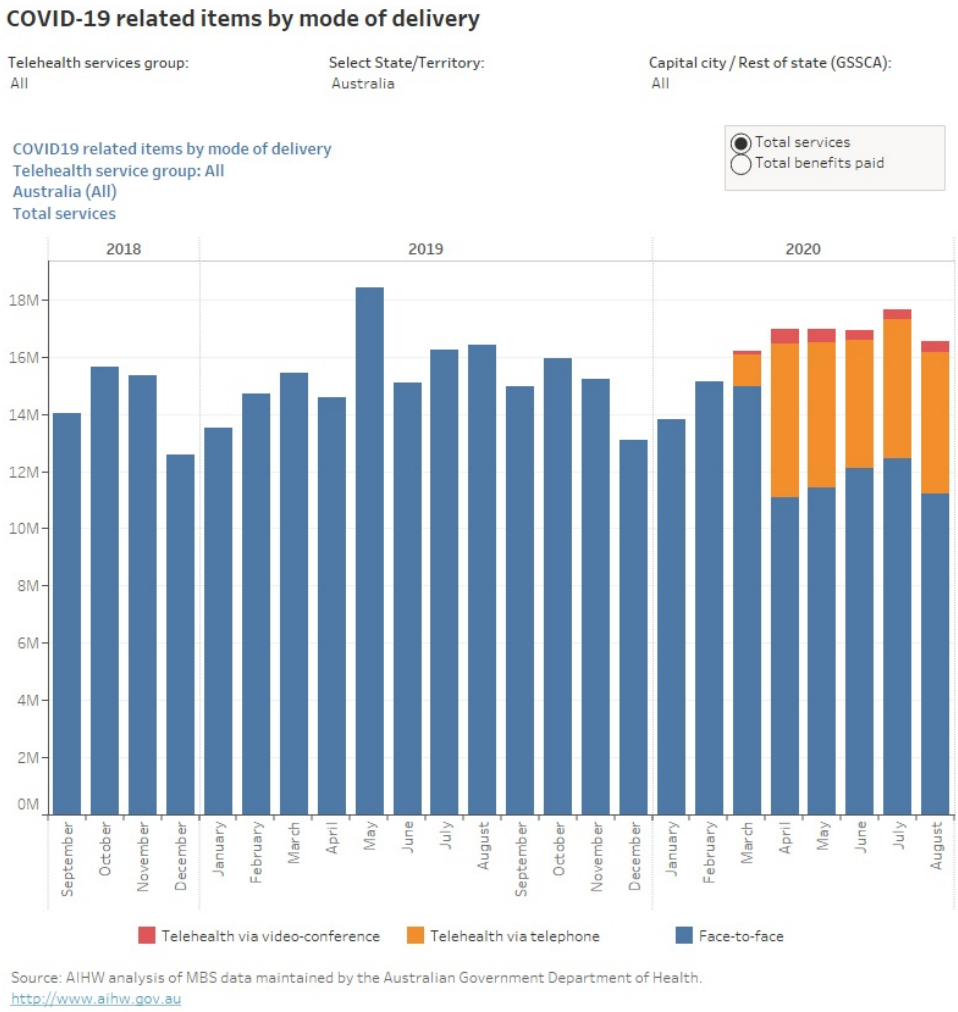
Source: AIHW analysis of MBS data maintained by the Australian Government Department of Health.
http://www.aihw.gov.au

For GPs, following the introduction of telehealth items from March 2020, more than one third (36%) of the services were rendered via telephone or video-conference in April 2020.

Specialist attendances in April 2020 decreased overall (16% from March 2020) but the services rendered via telephone or video-conference increased (388% compared with March 2020).

Figure 1.11: Total MBS services for COVID-19 related items for Specialist Attendances by mode of delivery, September 2018 to August 2020

This bar chart presents the number of services for COVID-19 related specialist attendance items by mode of delivery (face-to-face, telehealth consultation via telephone, and telehealth consultation via video-conference) from September 2018 to August 2020.

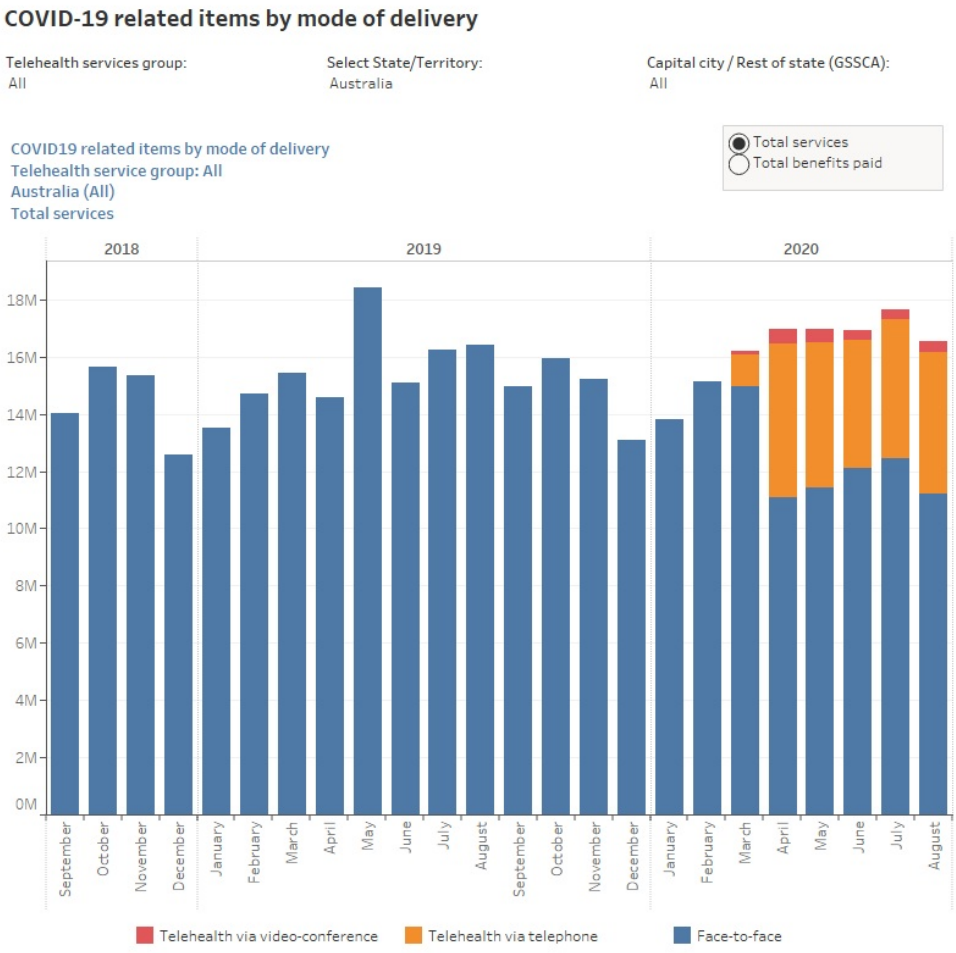


Source: AIHW analysis of MBS data maintained by the Australian Government Department of Health.
http://www.aihw.gov.au

The introduction of the telehealth items did not have much impact on the overall utilisation for obstetrics consultation services. Face-to-face consultation in April 2020 reduced by about 16% compared with March 2020, but the reduction in services utilisation via face-to-face was offset by an increase of services utilisation via telephone and video-conference.

Figure 1.12: Total MBS services for COVID-19 related items for Obstetrics by mode of delivery, September 2018 to August 2020

This bar chart presents the number of services for COVID-19 related obstetrics items by mode of delivery (face-to-face, telehealth consultation via telephone, and telehealth consultation via video-conference) from September 2018 to August 2020.

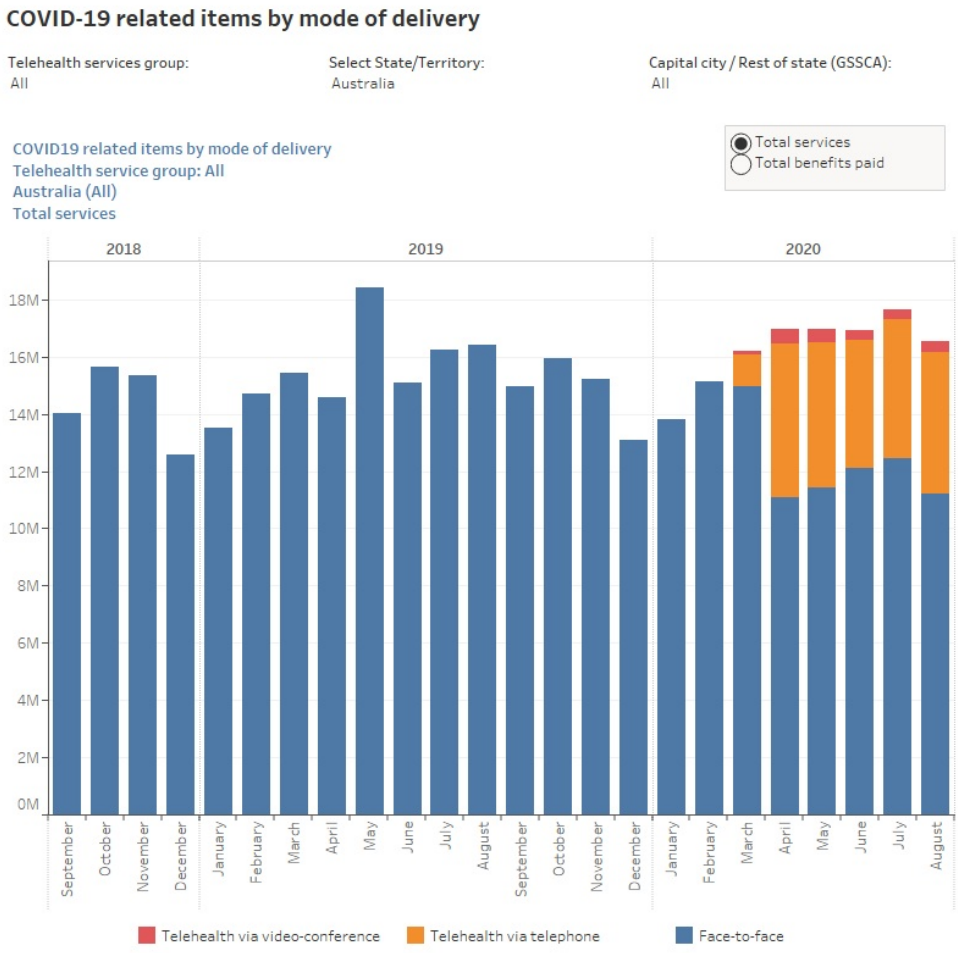


Source: AIHW analysis of MBS data maintained by the Australian Government Department of Health.
http://www.aihw.gov.au

Allied health experienced a large increase in the utilisation of MBS telehealth consultations. Since April 2020 about half of the telehealth consultations were through video-conferences.

Figure 1.13: Total MBS services for COVID-19 related items for Allied Health by mode of delivery, September 2018 to August 2020

This bar chart presents the number of services for COVID-19 related allied health items by mode of delivery (face-to-face, telehealth consultation via telephone, and telehealth consultation via video-conference) from September 2018 to August 2020.



Source: AIHW analysis of MBS data maintained by the Australian Government Department of Health.
http://www.aihw.gov.au

COVID-19 related MBS telehealth items for greater capital cities and rest of states

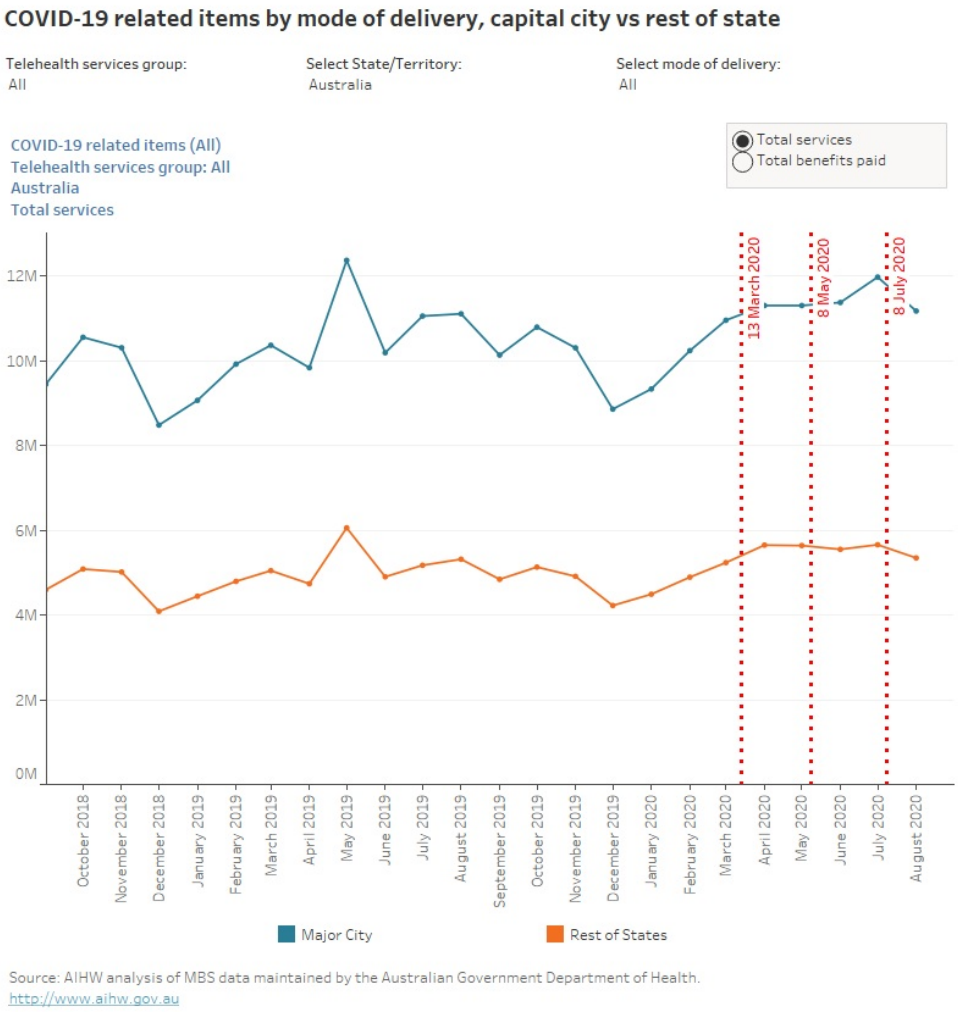
As a general trend, the number of face-to-face consultations has decreased from March 2020 across all states and territories. The findings for Greater capital city areas and Rest of state shared a similar trend in the utilisation of MBS-subsidised telehealth services in each state and territory.

For the Greater Melbourne area in Victoria, the volume of face-to-face consultations decreased in mid-March, and then stabilised in April to early May. This trend continued after the metropolitan lockdown in Melbourne on 8th July, reflecting the second wave in Victoria.

There was an increase in the utilisation of MBS services via telephone and video-conference for Greater Melbourne from March 2020, and a stabilisation between April and June. The metropolitan lockdown in Melbourne in early July saw medical practitioners switch mode of delivery from face-to-face to telephone and video-conference to a large extent.

Figure 1.14: Total MBS services and benefits paid for COVID-19 related items by mode of delivery, capital city versus rest of state, September 2018 to August 2020

This line chart presents the capital city and rest of state's number of services and benefits paid for COVID-19 related items by mode of delivery from September 2018 to August 2020.



Standard GP Attendances

This section examines the Standard GP attendance items, which includes 4 categories:

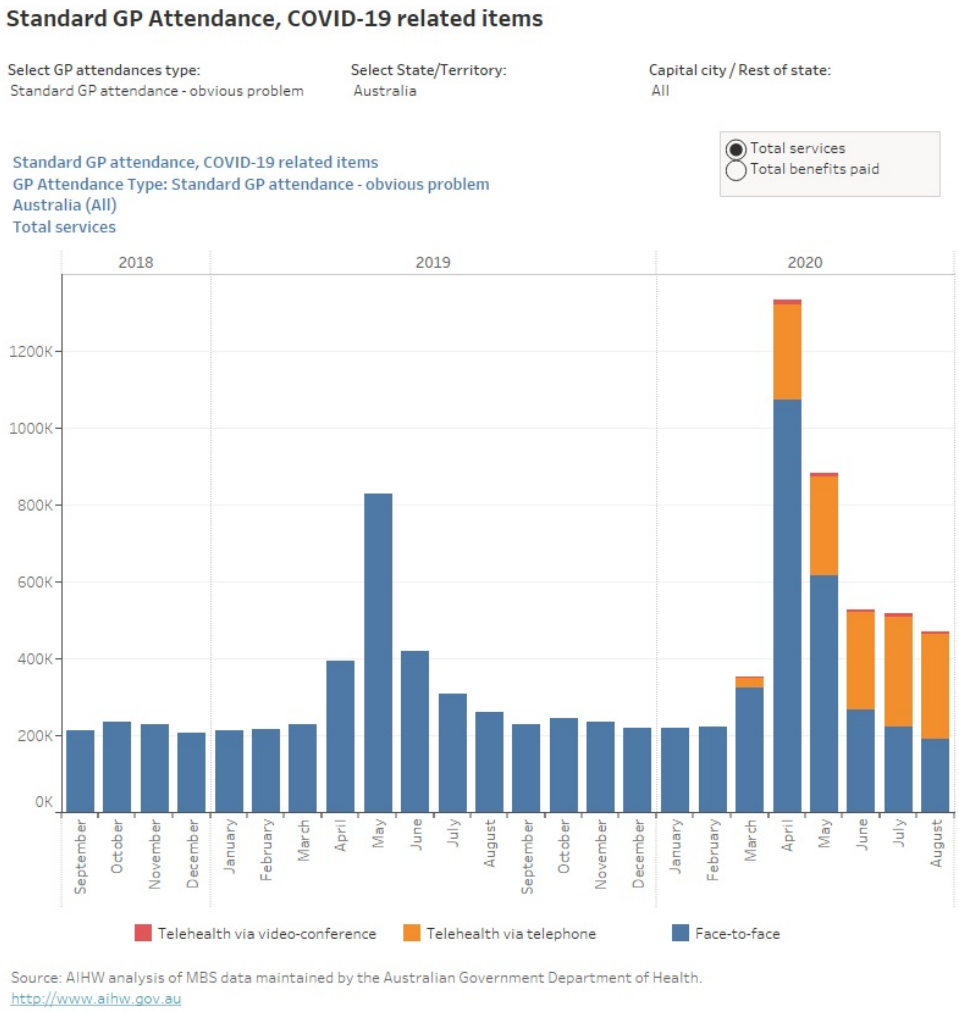
- ”For an obvious problem”
- ”Less than 20 minutes”
- ”At least 20 minutes”
- ”At least 40 minutes”.

Typically, there is a seasonal pattern for Standard GP attendance for obvious problems. In May and June each year, many people have their influenza vaccinations as part of a brief GP consultation. The COVID-19 pandemic appears to have encouraged people to have their vaccinations from April and drove the services up for the “obvious problem” category. The shift for the “obvious problem” category could also be due to patients requesting prescriptions for chronic conditions. The changes can be broadly described as:

- Change of timing: The peak for the influenza vaccination was usually in May but shifted to April in 2020.
- Change of volume: The number of services for "obvious problems" in April 2020 was nearly 4 times (278% increase) the volume in March 2020, and nearly 3 times (239% increase) the volume in April 2019.

Figure 1.15: Total MBS services and benefits paid, COVID-19 related items, Standard GP attendance - obvious problem, by mode of delivery, September 2018 to August 2020

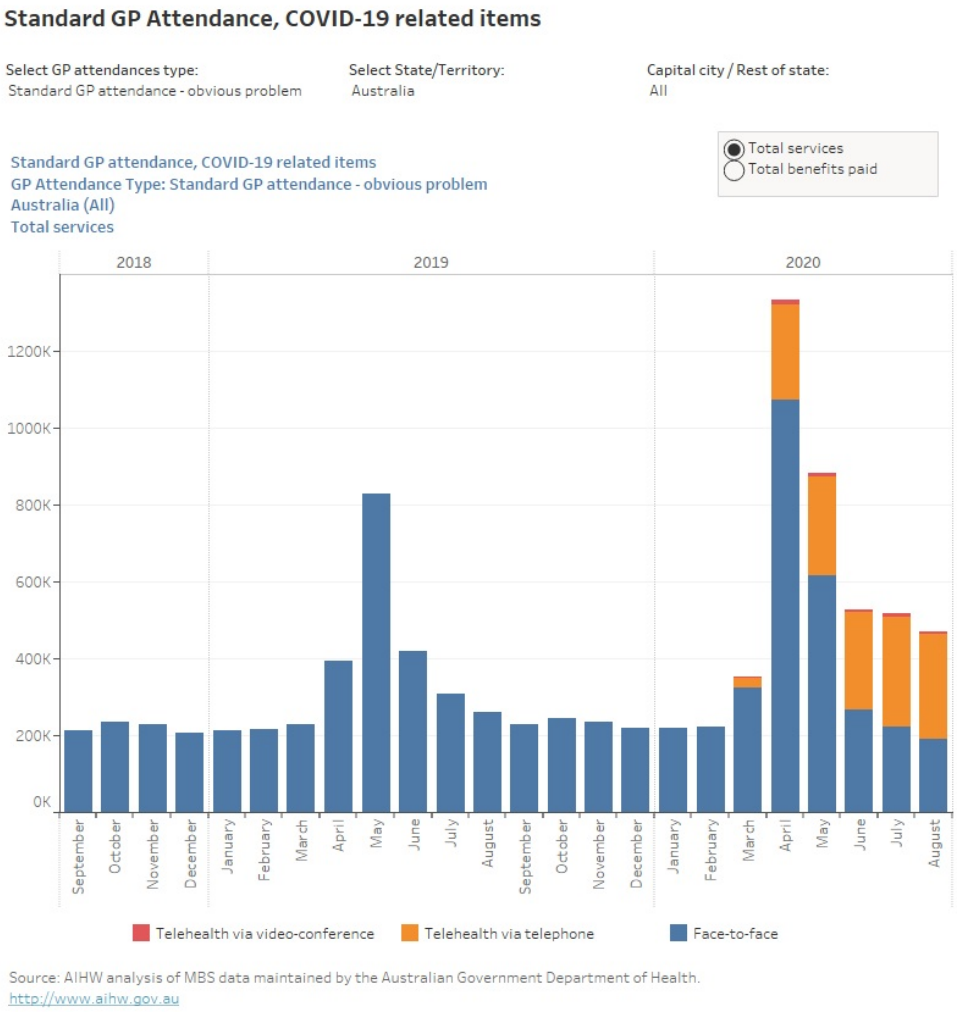
This bar chart presents the number of services and benefits paid for COVID-19 related items on the standard GP attendance category - obvious problem. The bar charts are presentable at the national level, state and territory level, and the capital city and rest of state level once the corresponding options are chosen. Time series range from September 2018 to August 2020.



For the less than 20 minutes attendances, the total volumes from March to August 2020 increased by about 6% compared with March to August 2019, and one-third (33%) of all services in March to August 2020 were rendered via telephone or video-conference.

Figure 1.16: Total MBS services, COVID-19 related items, Standard GP attendance - less than 20 minutes, by mode of delivery, September 2018 to August 2020

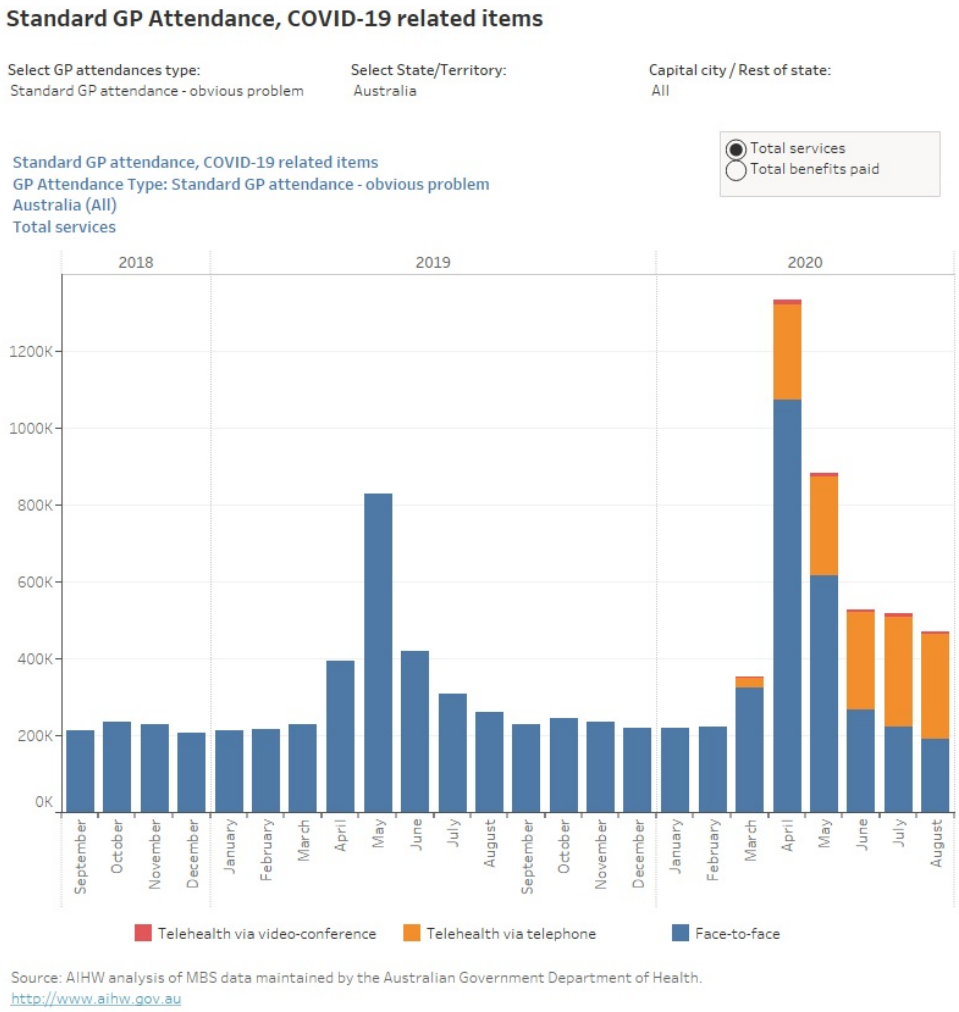
This bar chart presents the number of services and benefits paid for COVID-19 related items on the standard GP attendance category - less than 20 minutes. The bar charts are presentable at the national level, state and territory level, and the capital city and rest of state level once the corresponding options are chosen. Time series range from September 2018 to August 2020.



The At least 20 minutes and At least 40 minutes attendances shared a similar trend. There was a drop in April 2020 with an increase after that.

Figure 1.17: Total MBS services, COVID-19 related items, Standard GP attendance - at least 20 minutes, by mode of delivery, September 2018 to August 2020

This bar chart presents the number of services and benefits paid for COVID-19 related items on the standard GP attendance category - at least 20 minutes. The bar charts are presentable at the national level, state and territory level, and the capital city and rest of state level once the corresponding options are chosen. Time series range from September 2018 to August 2020.



Bulk-billing incentives for un-referred services

With the introduction of the temporary MBS items in response to COVID-19, there was also a requirement for certain patient groups to be bulk-billed. This was associated with a temporary increase in benefits paid for the existing MBS bulk-billing incentive items for Un-referred services. There was an increase in bulk-billing incentive payments from $55.6 million in March 2020 to an average of $130.4 million per month between April and August 2020.

The total number of Un-referred services associated bulk-billing incentives from April to August 2020 increased by about 18% compared with the same period in 2019. The total benefit paid associated with the bulk-billing incentives more than doubled (increased by 120%) compared with the same period in 2019.

Figure 1.18: Total MBS services for COVID-19 and pre-existing bulk-billing incentives for un-referred services, September 2018 to August 2020

This bar chart presents the number of services for COVID-19 and pre-existing bulk-billing incentives for un-referred services from September 2018 to August 2020.

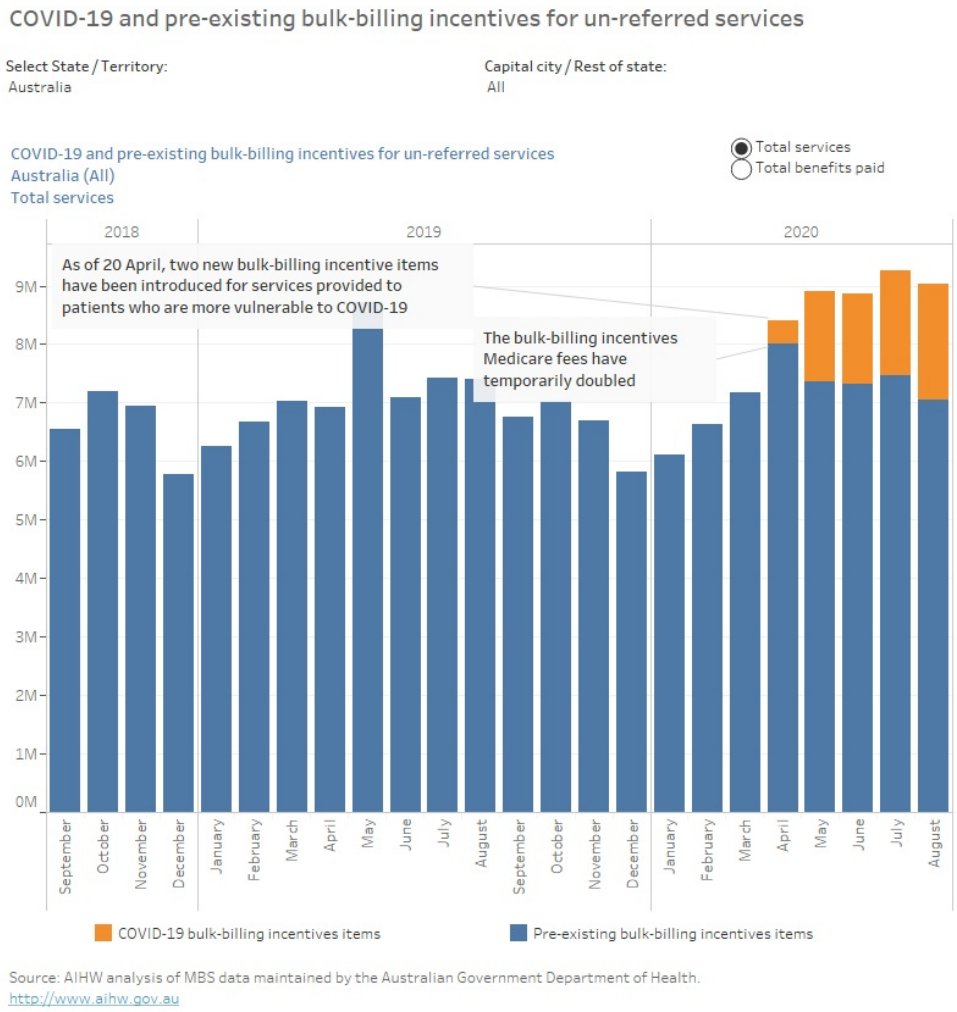


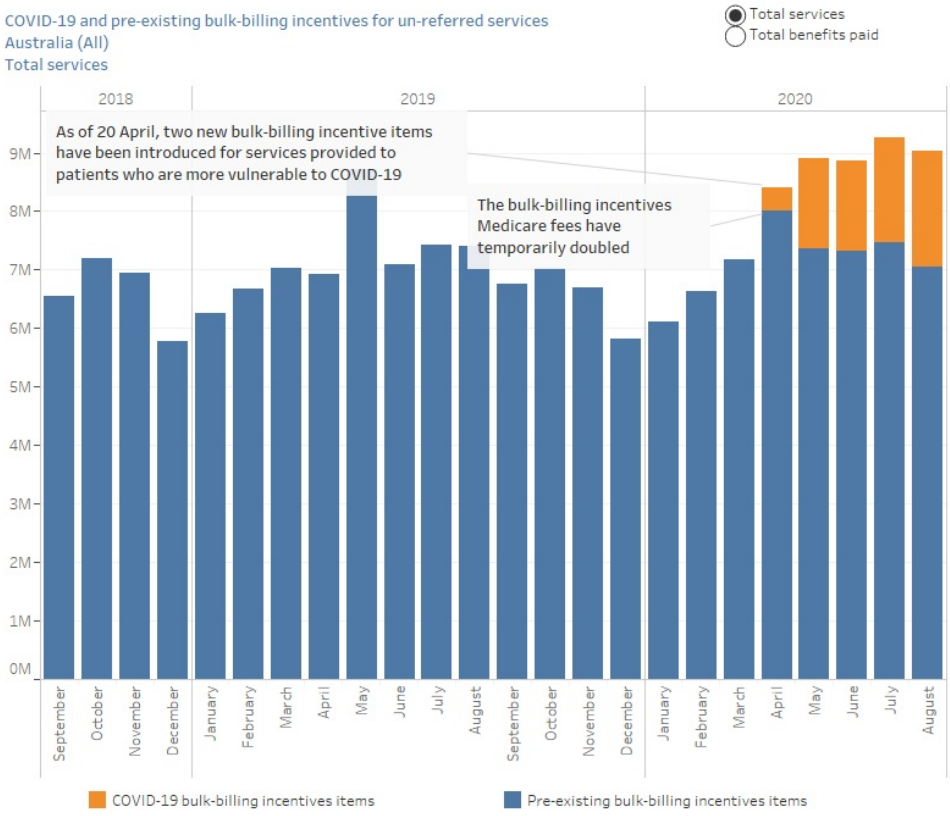
Figure 1.19: Total MBS benefits paid for COVID-19 and pre-existing bulk-billing incentives for un-referred services, September 2018 to August 2020

This bar chart presents the benefits paid for COVID-19 and pre-existing bulk-billing incentives for un-referred services from September 2018 to August 2020.

COVID-19 and pre-existing bulk-billing incentives for un-referred services

Select State / Territory:
Australia

Capital city / Rest of state:
All



Source: AIHW analysis of MBS data maintained by the Australian Government Department of Health.
http://www.aihw.gov.au

Impact on PBS service use

On this page:

What did the PBS data show?

This web report looks at the influence of COVID-19 on the Pharmaceutical Benefits Scheme (PBS) (including the Repatriation Schedule of Pharmaceutical Benefits (RPBS)) over the first eight months of 2020. The analysis compares the number of prescriptions dispensed and government benefits paid with the same period in the previous year.

Across the PBS, the total volume of scripts dispensed was similar in the 2019 and 2020 periods, with an increase of 0.6% in 2020. Over the past 7 years the yearly average growth in PBS script volumes was 1.5%, with the annual percent change ranging from -1.2% to 3%. This finding suggests that, to date, the COVID-19 pandemic has had minimal influence on overall script volumes for 2020.

There were other impacts during the period with changes in consumer behaviour coinciding with the introduction and then easing of restrictions. For example, there were unusually high volumes of scripts dispensed in March 2020, coinciding with the introduction of restrictions nationally, and this was followed by a decrease in April 2020. While it is difficult to directly measure the factors influencing health service use by the population, we can see the impacts on the PBS in the service use data. More detail on these impacts are provided below.

National COVID-19 measures related to medicines

In March 2020, the Australian Government implemented temporary changes to medicines regulation to support Australians' continued access to PBS medicines in response to the COVID-19 pandemic. Some of these changes were in response to a dramatic increase in demand for medicines during early March, which resulted in pharmacies and wholesalers reporting medicine shortages (1).

The temporary measures included:

- Recommended restrictions on the quantity of medicines purchased to prevent unnecessary medicine stockpiling. Pharmacists were required to limit dispensing of certain prescription medicines to a one-month supply.
- Continued dispensing arrangements allow pharmacists to supply one month's supply of a patient's usual medicine without a prescription at the usual PBS consumer co-payment. Under usual Continued Dispensing arrangements, only certain oral contraceptives and lipid-lowering medicines (statins) can be supplied without a prescription. In response to the 2019–20 bushfire crisis, and then the COVID-19 pandemic, the Government temporarily expanded the range of PBS medicines that could be supplied under the Continued Dispensing (Emergency Measures). These temporary emergency arrangements will cease on 31 March 2021.
- A home delivery service for PBS and RPBS medicines.
- Digital image based prescriptions to support COVID-19-related telehealth medical services. Prescribers can now create a digital image of the patient's prescription to support supply of their medicines. Pharmacists can dispense medications and make PBS claims from the digital image of the prescription sent through by the prescriber.
- Serious Shortage Medicine Substitution Notices to allow medicine substitution by the pharmacist in the event of a shortage without prior approval from the prescribing doctor.

How many scripts were dispensed?

The following data visualisation shows the difference in the number of scripts dispensed (per cent), in January to August, 2019 and 2020, nationally:

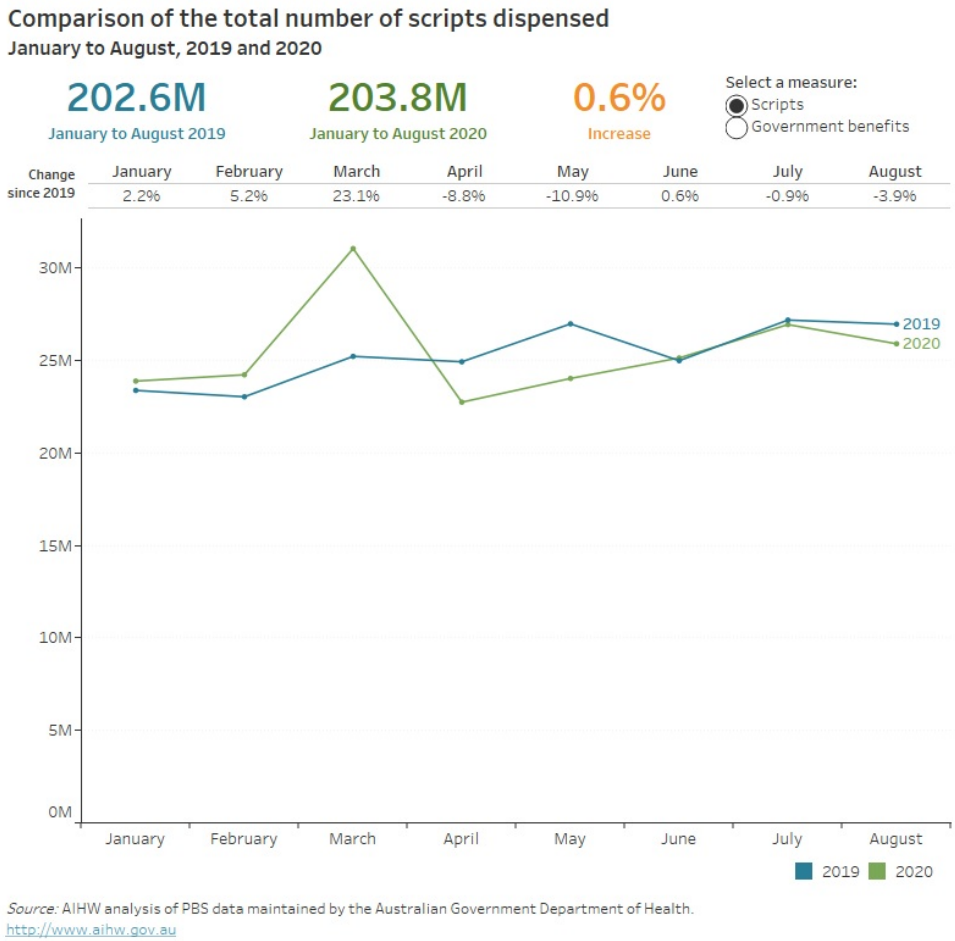
- Nationally, there was a 0.6% increase in the number of scripts dispensed for the first eight months of 2020 (203.8 million) compared to the equivalent period in 2019 (202.6 million).
- In March, there was an increase of 23.1% in the number of scripts dispensed in 2020 (31.0 million), compared with 2019 (25.2 million). This spike was most significant for the group of medicines used to treat respiratory-related conditions such as asthma and chronic obstructive pulmonary disease (COPD).

How much in PBS benefits did the government pay?

The following data visualisation shows the total amount of government benefits paid, in January to August, 2019 and 2020 nationally through the PBS:

- Nationally, there was a 7.5% increase in the amount of government benefits paid for the first 8 months of 2020 ($8.6 billion) compared to the equivalent period in 2019 ($8.0 billion).
- In March, there was an increase of 22.1% in the amount of government benefits paid in 2020 ($1,205.3 million), compared with 2019 ($987.3 million).
- The higher percentage increase of benefits paid in 2020 relative to the increase in the volume of scripts dispensed has been observed in previous periods. Over time spending through the PBS has generally risen faster than the volume of scripts. This could be related to the listing of new medicines on the PBS, which tend to have higher prices and/or have an initial high volume due to unmet demand. It could also be related to an increased proportion of patients with concessional status (due to changes in welfare status as a result of the COVID-19 pandemic), widening restrictions of PBS listed medicines, a change in treatment paradigms, and so forth. Further detailed analysis is required to fully understand the reasons for this disparity.

This line graph compares the monthly scripts dispensed and government benefits paid from January to August 2020 compared to the same period in 2019. Beyond the spike in script volume in March 2020 the monthly scripts for 2019 and 2020 followed a similar trajectory. Except for a slight drop in benefits paid in May 2020, the monthly benefits paid was higher than the same month in the previous year.



Source: AIHW analysis of PBS data maintained by the Australian Government Department of Health.
http://www.aihw.gov.au

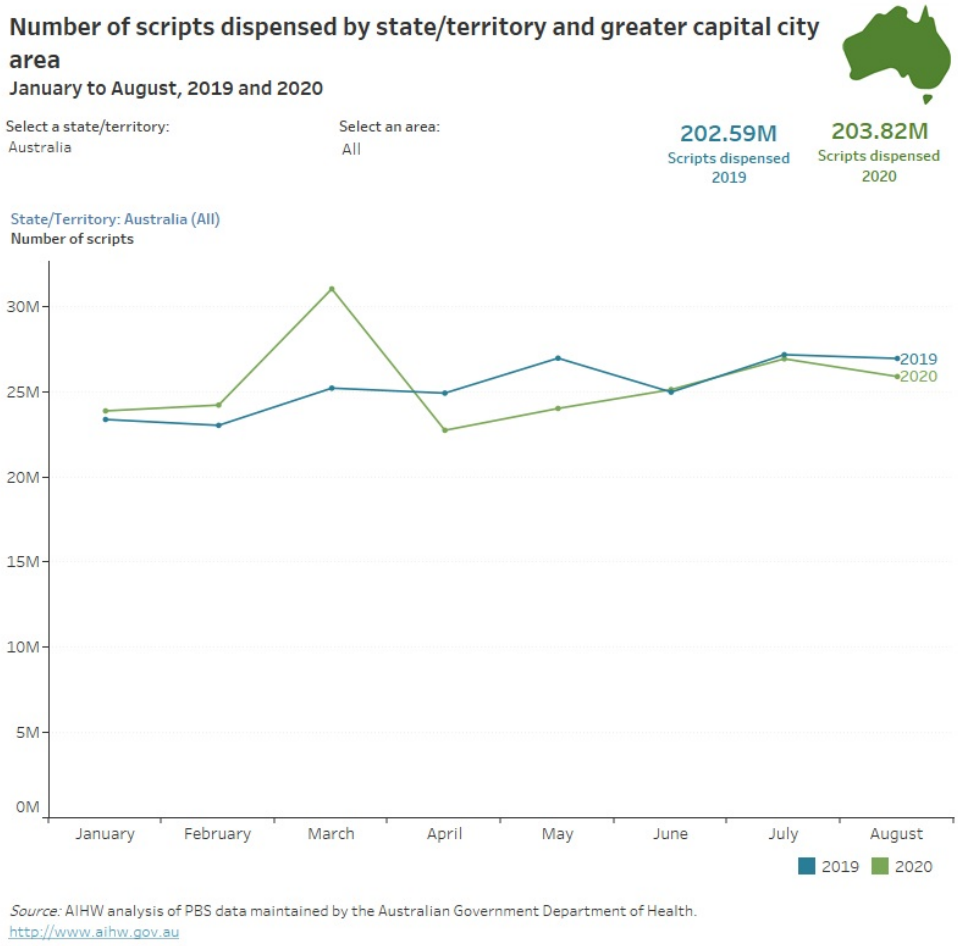
How did script dispensing vary by location?

Scripts dispensed are presented using greater capital city statistical areas as defined by the Australia Bureau of Statistics. Scripts were assigned to an area based on the patient's Medicare enrolment postcode which corresponds to most people's residential address.

The following data visualisation shows the difference in the number of scripts dispensed (per cent), in January to August, 2019 and 2020, nationally and in each state and territory. States and territories are further split by greater capital cities and rest of state/territory areas:

- The national pattern in 2020 shows an increase in the number of scripts dispensed in March, a decrease in April and May followed by a small percent change in June to August was broadly consistent across all states and territories.
- This pattern was also broadly similar for greater capital cities and regional areas, however, the shifts between months were not as marked in the regional areas compared with the capital cities, with lower growth in March and lower declines in the following months.

This visualisation presents monthly scripts dispensed graphically and as a table, in states/territories and greater capital city areas. The line graph shows that the national pattern of script volumes was generally consistent across the states/territories. The table and bar graph show the percent change comparing the same months in 2020 to 2019. Northern Territory had either the largest percent increase or the smallest percent decrease in a month



Source: AIHW analysis of PBS data maintained by the Australian Government Department of Health.
http://www.aihw.gov.au

How did people get their medicines?

People obtain their medicines via an original (first time dispensing of a prescription) prescription or refill their medicines via a repeat (subsequent supply from an original prescription) prescription.

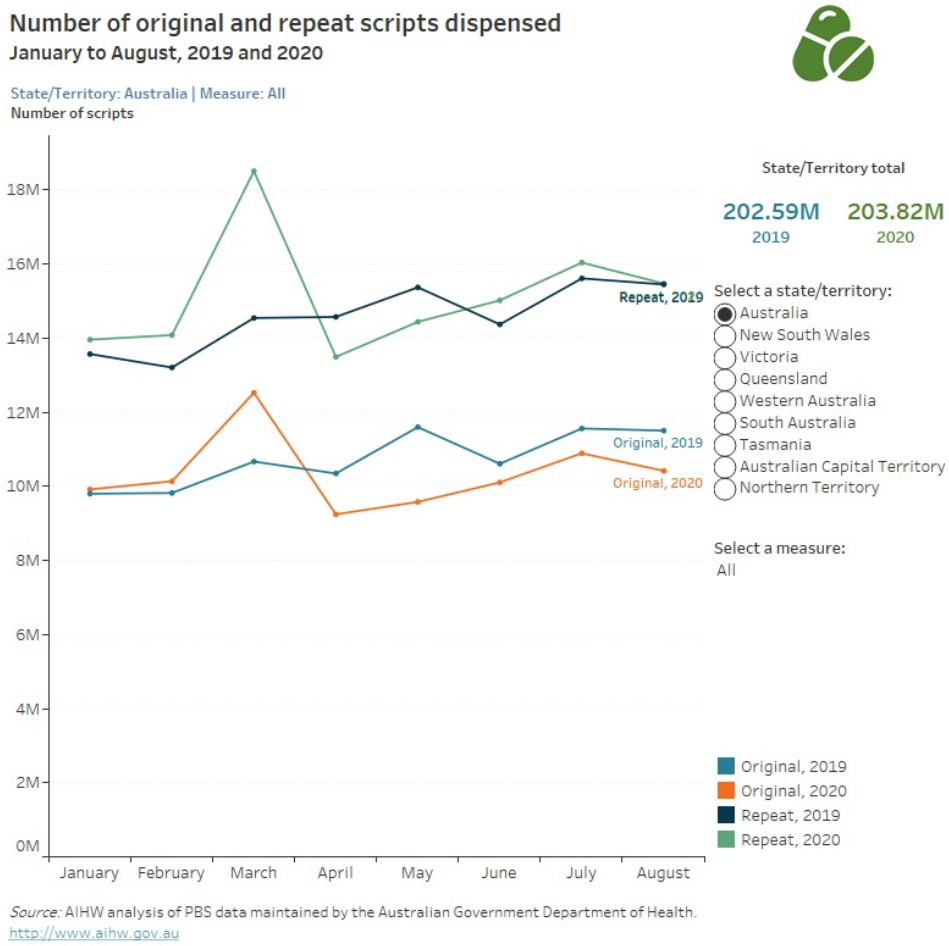
In response to the COVID-19 pandemic, from March 2020 the Australian Government introduced a range of temporary telehealth items in the MBS which allowed various medical practitioners to provide consultations either by telephone and/or videoconference. These changes included the introduction of digital image based prescriptions.

These temporary measures may have changed consumer behaviour. Original prescriptions may have decreased when telehealth was not feasible, and consumers may have chosen to avoid attending healthcare appointments.

The following data visualisation shows the number of scripts dispensed by original or repeat prescription, nationally and at state and territory levels from January to August, 2019 and 2020:

- From January to August, 2019 and 2020, approximately 40% of scripts dispensed were original and 60% were repeats.
- During March 2020, there was a 17.4% increase in the number of original scripts and a 27.3% increase in repeat scripts, compared to the same period in 2019. This change in consumer behaviour was likely due to stockpiling at the start of the pandemic.

This visualisation presents monthly scripts dispensed from an original or a repeat prescription. The line graph shows a similar pattern over the 8 months for both types of scripts with repeat scripts (27.3%) having a greater percent increase in March 2020 from March 2019 compared to original scripts (17.4%). The bar chart shows that following the consistent spike across all variables in March 2020, the percent change for repeat scripts moved into the positive while original scripts remained in the negative. All states and territories, except the Northern Territory, experienced a percent decrease in original scripts dispensed in April to August 2020 compared to the same period in 2019. The Northern Territory had a percent decrease in April and May 2020 then returned to a percent increase in June to August.



Source: AIHW analysis of PBS data maintained by the Australian Government Department of Health.
http://www.aihw.gov.au

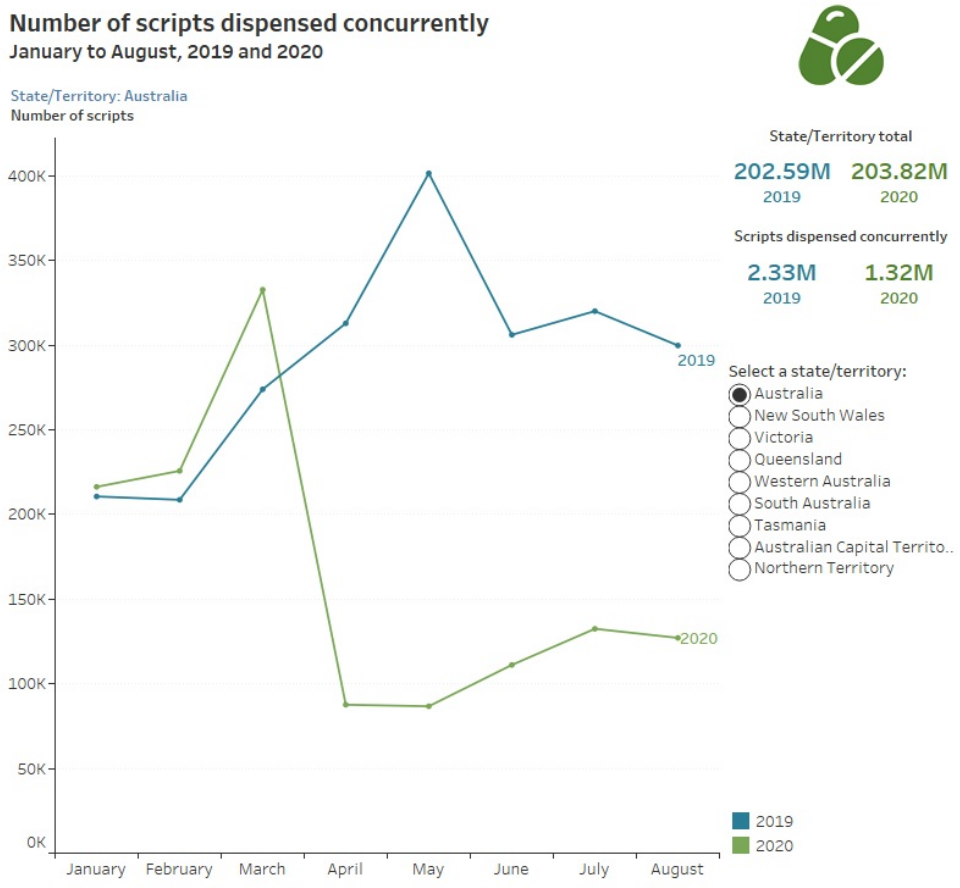
How many original and repeat prescriptions were dispensed at the same time?

The PBS allows for original and repeat prescriptions to be supplied at the same time, in certain circumstances, according to Regulation 49 (previously Regulation 24). A common use of this rule is for people living or travelling to very remote areas within Australia or overseas. At the early stages of the pandemic there was significant concern around medication shortages and the risk of this option being overused.

The following data visualisation shows the number of scripts dispensed concurrently, nationally and at state and territory levels from January to August, 2019 and 2020:

- Nationally, there was an increase in scripts dispensed concurrently (21.5%) in March 2020 compared to March 2019. This rapid rise coincided with the Australian Government Therapeutic Goods Administration advising about potential medicine shortages and the Department of Health requesting health practitioners limit this practice.
- Nationally, there was a 72.0% decrease in the number of scripts dispensed concurrently in April 2020, compared to April 2019. This downward trend continued throughout the subsequent months in 2020.
- Over the whole period, the number of scripts dispensed concurrently in 2020 was 0.6% of all scripts compared with 1.2% in the same period in 2019.

This visualisation presents monthly scripts dispensed where an original prescription and all repeats were dispensed all together. Comparing 2020 to 2019, all states and territories had a percent increase in March and percent decreases from April to August.



Source: AIHW analysis of PBS data maintained by the Australian Government Department of Health.
http://www.aihw.gov.au

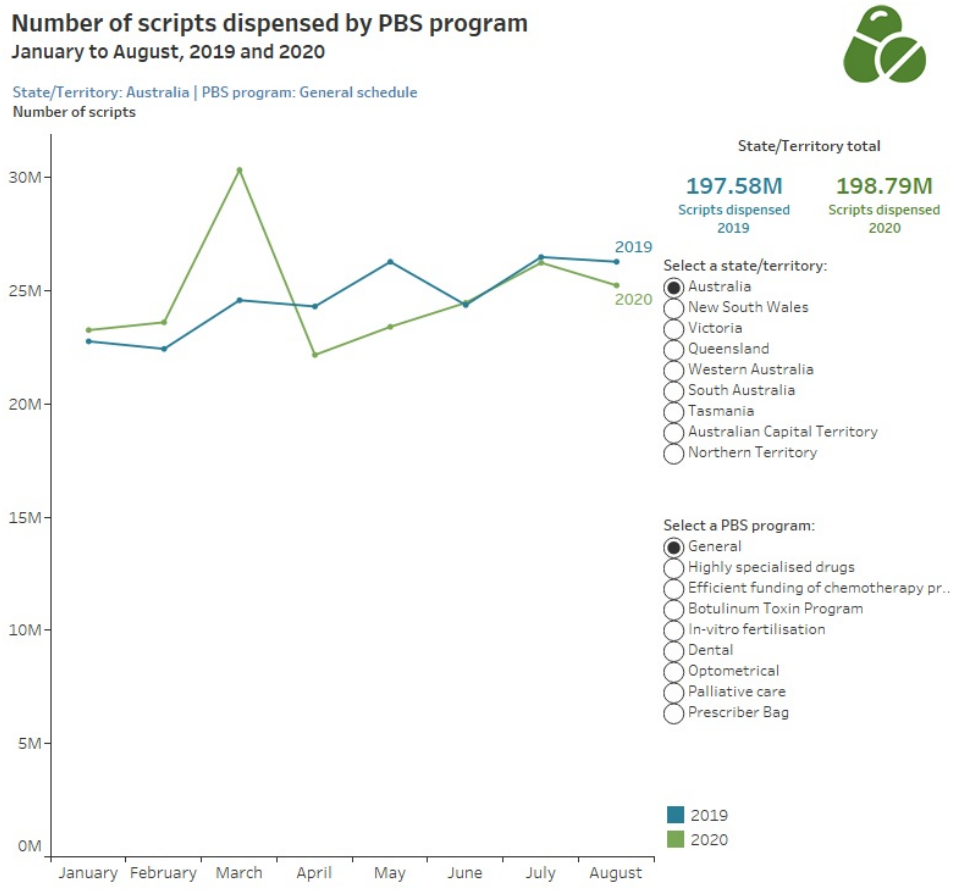
How did each PBS program contribute to medicine dispensing?

The majority of PBS medicines are prescribed by medical professionals and dispensed by community pharmacies. The PBS also provides specific schedules for other prescribers such as dentists and optometrists. There are also several programs funded under Section 100 of the National Health Act that provide alternative ways of providing medicine when the usual supply through community pharmacies is unsuitable. The largest of these are the Highly specialised drugs and Efficient funding of chemotherapy programs, both relate to medicines provided predominantly in tertiary care facilities such as hospitals, rather than in the community.

The following data visualisation shows the number of scripts dispensed by PBS programs, nationally and at state and territory levels from January to August, 2019 and 2020. Some specific effects included:

- The temporary suspension of non-urgent elective surgeries effective from 26 March 2020, affected a number of services such as in-vitro fertilisation. In April, there was a 57.7% decrease in the number of scripts dispensed for in-vitro fertilisation, compared to April 2019. There were subsequent increases from June onwards.
- Due to the national measures introduced to limit the spread of COVID-19, there were concerns that patients on chemotherapy would choose not to access their treatments to avoid the risk of being infected by COVID-19. However this was not evident in the data. Nationally, prescriptions within the S100 efficient funding of chemotherapy showed an increase in script volumes that was consistent with long term trends, rather than the suspected decrease.

This visualisation presents monthly scripts dispensed according to PBS programs which include; general, palliative care, dental, optometrical, prescriber bag, highly specialised drugs, efficient funding of chemotherapy, in-vitro fertilisation and botulinum toxin programs. The dental schedule had a large percent decrease of 17.1% in April 2020 and 11.6% in May, compared to the same months in 2019. This was due to suspension of non-urgent health services.



Source: AIHW analysis of PBS data maintained by the Australian Government Department of Health.
http://www.aihw.gov.au

What medicines did people have dispensed?

The Anatomical Therapeutic Classification (ATC) groups have been used to show the impact of COVID-19 on medicine utilisation. The ATC is a classification system for medicines and is defined by the World Health Organisation.

The following data visualisation shows the number of scripts dispensed by ATC groups, nationally and at state and territory levels from January to August, 2019 and 2020:

- Nationally, there was an 87.4% increase in the number of scripts dispensed for respiratory system medicines in March 2020 compared to the corresponding period in 2019. This increase was largely driven by the group of medicines used to treat respiratory related conditions such as asthma and chronic obstructive pulmonary disease (COPD).
- Nationally, there was a significant decrease in scripts dispensed for anti-infectives (this group consists predominantly of antibiotics and antivirals) from 2.5 million in March 2020 to 1.5 million in April. This downward trend carried through to August 2020 compared to the same months in 2019. This decrease in antimicrobial utilisation could be associated with COVID-19 measures such as physical distancing and improved hand hygiene practices. This corresponds with reports of lower numbers of influenza cases in Australia compared to previous years.

This visualisation presents monthly scripts dispensed graphically and as a table, according to ATC groups such as cardiovascular system, nervous system, sensory organs. Among the ATC groups, respiratory system had the largest percent increase of 10.7% over the 8 months in 2020 compared to the same period in 2019. Anti-infective for systemic use had the largest percent decrease of 21.8%.

Number of scripts dispensed by ATC group

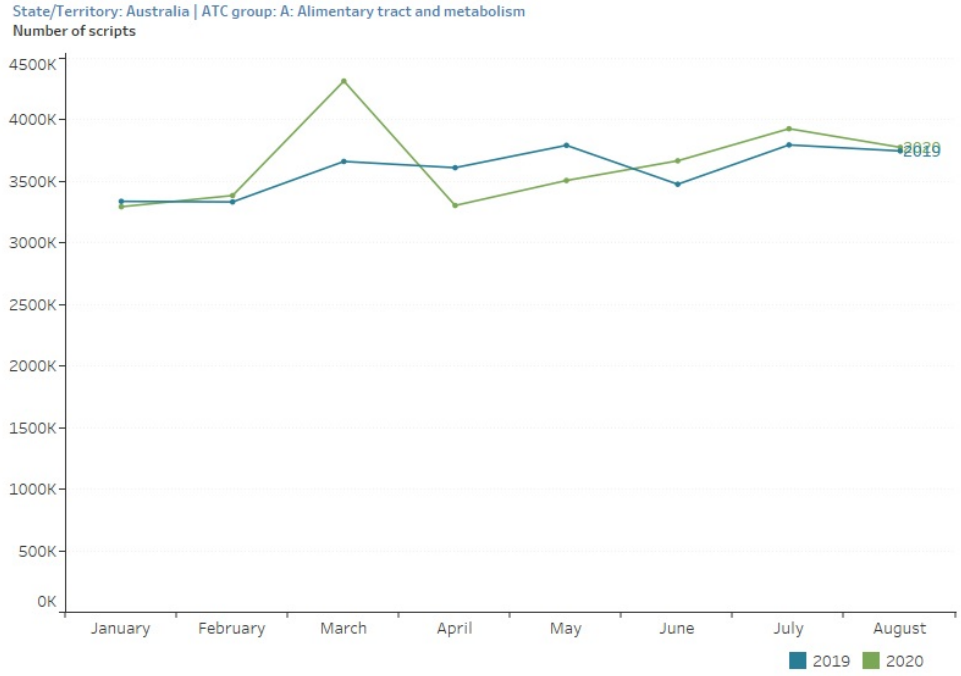
January to August, 2019 and 2020

Select a state/territory:
Australia

Select a ATC group:
A, Alimentary tract and metabolism

28.76M
Scripts dispensed
2019

29.18M
Scripts dispensed
2020



Source: AIHW analysis of PBS data maintained by the Australian Government Department of Health.
http://www.aihw.gov.au

Where do I go for more information?

For more information on medicines in the health system, see:

- Services Australia Medicare Statistics
- Department of Health PBS Statistics
- Pharmaceutical Benefits Scheme.

Technical notes

Technical notes

Statistics in this release were extracted by the Australian Institute of Health and Welfare (AIHW from the Medicare Benefits Schedule (MBS) claim records data in the Australian Government Department of Health Enterprise Data Warehouse.

The MBS provides a subsidy for services listed in the MBS, for all Australian residents and certain categories of visitors to Australia. The major elements of Medicare are contained in the Health Insurance Act 1973. See details of the services covered by the MBS.

Medicare benefits are claimable only for 'clinically relevant' services rendered by an appropriate health practitioner. A 'clinically relevant' service is one which is generally accepted by the relevant profession as necessary for the appropriate treatment of the patient.

In general, MBS statistics exclude services:

- to public inpatients and public outpatients of public and private hospitals;
- to patients in public Accident and Emergency Departments
- covered by the Department of Veterans' Affairs National Treatment Account
- covered by an entitlement conferred by legislation other than the Health Insurance Act (for example, services covered by third party or workers' compensation)
- covered by other publicly funded programs.

The statistics in this release are reported by the month of processing, for the period September 2018 to August 2020. It should be noted that this is not always the same as the month of service (the month in which the visit to a health practitioner occurred, the month in which a procedure was performed, or the month in which a test was undertaken).

Statistics are available on the total number of services and benefits paid, in and out of hospital, by region within state and territory. In addition, MBS-subsidised services are reported using the broad type of service (BTOS) classification, whereby each MBS item is allocated to a BTOS category. The BTOS groups presented in this report are:

- un-referred (GP) attendances
- practice nurse services on behalf of a GP
- specialist attendances
- obstetrics
- anaesthetics
- pathology
- diagnostic imaging
- operations
- assistance at operations
- optometry
- radiation therapy
- other allied health
- other MBS.

On the 13 March 2020 telehealth via video conferencing and telephone items were introduced into MBS. Statistics on these new items as well as the pre-existing items are published in this release to provide an overview of the impact of the new items on overall utilisation of MBS. Details of the changes to the MBS on account of COVID-19, are available in a Factsheet: COVID-19 Temporary MBS Telehealth Services.

Statistics in this release are presented separately for non-hospital and hospital MBS subsidised services. Non-hospital MBS subsidised services refer to services provided in non-inpatient settings and include services in private outpatient clinics. Hospital MBS subsidised services include all services to private inpatients of public and private hospitals, and services rendered as part of a privately insured episode of hospital-substitute treatment.

Geography

The geographical representation of data presented in this release is by region (capital city and other), statistical area (SA3) and primary health network (PHN).

In compiling the statistics by geographical classification, the patient's postcode has been allocated to the different classifications. As there is not a one-to-one relationship between postcode and the various geographical classifications presented here, standard statistical concordance processes have been applied to generate the data to create these classifications.

In considering the data presented here, it should be noted that since the patient postcode in MBS data is a mailing address postcode, statistical modifications had to be made to accommodate those people who use a PO Box and so forth. Also, as some patients changed enrolment postcodes during a month, services were allocated to their postcode with the largest number of service, before their data were allocated to a region.

Greater Capital City Statistical Areas (GCCSAs) are geographical areas that represent the functional extent of each of Australia's capital cities. This geographical area has been developed by the Australian Bureau of Statistics and includes people who regularly socialise, shop or work within the city, but live in the small towns and rural areas surrounding the city. GCCSAs are not bound by a minimum population size criterion.

PHNs are organisations that connect health services across a specific geographic area (PHN areas). There are 31 PHN areas that cover the whole of Australia with the boundaries defined by the Department of Health.

Statistical Areas Level 3 (SA3s) is a type of geographical classification defined by the Australian Bureau of Statistics (ABS) to provide a regional breakdown of Australia. There are 336 geographical areas covering Australia, with boundaries defined by the ABS. Each SA3 generally has a population of between 30,000 and 130,000 people. Allocation to an SA3 for Medicare data is based on the patient's usual place of residence, rather than where they received treatment.

Technical notes

About the data

The Australian Government subsidises the cost of a wide range of prescription medicines through two separate schemes, the Pharmaceutical Benefits Scheme (PBS) and the Repatriation Pharmaceutical Benefits Scheme (RPBS). Claims for reimbursement for the supply of PBS- or RPBS-subsidised medicines are submitted by pharmacies through Services Australia for processing, and are provided to the Australian Government Department of Health. Subsidies for prescription medicines are available to all Australian residents who hold a current Medicare card, and overseas visitors from countries with which Australia has a Reciprocal Health Care Agreement. Patients pay a contribution to the cost of the medicine (co-payment), and the Australian Government covers the remaining cost. This remaining cost is referred to as the benefit paid.

PBS data in this report are from records of prescriptions dispensed under the two schemes, where either:

- the Australian Government paid a subsidy
- the prescription was dispensed at a price less than the relevant patient co-payment (under co-payment prescriptions) and did not attract a subsidy.

PBS data cover all prescriptions dispensed by approved suppliers, including community pharmacies, public and private hospital pharmacies, and dispensing doctors.

PBS does not cover:

- over-the-counter purchases (non-prescription)
- private prescriptions
- medicines supplied to admitted patients in public hospitals, although prescriptions to patients on discharge and non-admitted patients in all states and territories are in scope, except New South Wales and the Australian Capital Territory.

Medicines dispensed through alternative arrangements where the patient cannot be identified, such as direct supply to Aboriginal health services, are excluded.

Provision of some medicines may be under-represented in those remote areas, particularly for the Northern Territory with a high proportion of Aboriginal and Torres Strait Islander people who can access medicines through Aboriginal health services.

The number of prescriptions represents the total number of times that a prescribed medicine is supplied to a patient. For individual prescriptions where the quantity dispensed varied from the listed maximum quantity, no adjustment was made for increased or reduced quantity supplied. The supply was counted as one prescription.

Prescriptions dispensed and government benefits paid in this report are presented by month which is based on the date the medicine was supplied to the patient.

The Schedule of Pharmaceutical Benefits

The Schedule of Pharmaceutical Benefits (the Schedule) is released monthly and provides information on the arrangements for the prescribing and supply of pharmaceutical benefits under the PBS. The Schedule lists all of the ready-prepared items subsidised under the PBS.

Anatomical Therapeutic Chemical (ATC) Classification

PBS listed medicines are organised into Anatomical Therapeutic Chemical (ATC) classification groups according to the body system or organ on which they act. See the World Health Organization Collaborating Centre for Drug Statistics Methodology (WHOCC) for further information on the ATC classification system.

The ATC Classification used in this report is from the Australian Government Department of Health's version of the WHOCC ATC Classification, which has some minor differences from the WHOCC version, based upon a particular medicine's usage in Australia. The Schedule of Pharmaceutical Benefits according to ATC groups can be viewed via browsing by body system.

PBS programs types

This web report has categorised PBS listed medicines into "program types" which reflect the groupings in the Schedule and are described below.

Most PBS medicines are dispensed by community pharmacies and used by patients at home. These are known as 'General Schedule' medicines.

Section 100 of the *National Health Act 1953* provides for an alternative method of medicines supply to patients when normal PBS arrangements are not appropriate.

Section 100 programs include:

- Highly Specialised Drugs Program
- Efficient Funding of Chemotherapy
- Botulinum Toxin Program
- Growth Hormone Program*
- In-Vitro Fertilisation Program

Separate sub-schedules exist for specific prescribers or for a specific cohort of the population. These include:

- Dental
- Optometrical
- Palliative Care
- Prescriber bag

Items annotated with an asterisk (*) were excluded from visualisation titled “Number of scripts dispensed by PBS program”.

Geography

Greater Capital City Statistical Areas (GCCSAs) are geographical areas that represent the functional extent of each of Australia’s capital cities. This geographical area has been developed by the Australian Bureau of Statistics and includes people who regularly socialise, shop or work within the city, but live in the small towns and rural areas surrounding the city. GCCSAs are not bound by a minimum population size criterion.

Medicare enrolment postcode is used as a proxy for the patient residence as it corresponds to most people’s usual residence. If the patient postcode was unknown or invalid, the postcode of the dispensing pharmacy is used instead.

PHNs are organisations that connect health services across a specific geographic area (PHN areas). There are 31 PHN areas that cover the whole of Australia with the boundaries defined by the Australian Government Department of Health.

Statistical Areas Level 3 (SA3s) is a type of geographical classification defined by the Australian Bureau of Statistics (ABS) to provide a regional breakdown of Australia. There are 336 geographical areas covering Australia, with boundaries defined by the ABS. Each SA3 generally has a population of between 30,000 and 130,000 people. Allocation to an SA3 for PBS data is based on the patient’s usual place of residence, rather than where they received treatment.

Data

Related material

The below resources contain further information about the impacts of COVID-19.

Resources

Related topics

- Health & welfare expenditure
- Primary health care