The COVID-19 pandemic has affected all aspects of life including the health of Wisconsinites, the use of health care services, and the economics of health care. This special edition InfoByte provides a snapshot of the pandemic's impact and Wisconsin's progress towards recovery.

The Wisconsin Health Information Organization (WHIO) houses Wisconsin's All-Payer Claims Database, dedicated to better health, health care and health care value gained from objective information. The WHIO includes data on about 4.9 million insured lives voluntarily contributed by WI insurers, employers, and the Medicaid program.

Questions? Contact the WHIO at 608-442-3876 or info@whio.org.

A high-level view of charges for health care services indicates that not all services were equally affected by the COVID-19 pandemic. Hospitalizations, office visits and ambulatory surgery center services experienced a large decrease in utilization between March-June 2020, while access to prescription drugs and dialysis services remained relatively stable. Overall, billed charges were 13.7% lower in 2020 compared to 2019 with the largest percentage reduction in office visits.
It is important to quantify the financial impact that the COVID-19 pandemic is having on WI. While there are countless direct and indirect costs, the WHIO estimated the cost of hospitalizations through August 27, 2021. The table shows adjusted average charges for a COVID-19 hospitalization by type of insurance. These figures closely reflect what was paid. Using these and other data, an estimate of the total cost of hospital care is provided below. The number of hospitalizations was obtained from the WI Department of Health Services Website (www.dhs.wisconsin.gov/covid-19/cases/htm#hospitalizations).

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$14,750 \times 35,448 = \$522,858,000$

Adjusted, Weighted per Hospitalization Charge

Hospitalizations as of 08-27-2021

Estimated Total Hospitalization Charges

Wisconsin generally experiences an increase in viral and bacterial respiratory care utilization in the winter months. In May 2020, the American Medical Association released a new billing code specific to COVID-19. However, prior to that time, COVID-19 care was billed as viral or bacterial respiratory disease. This graph depicts higher utilization for viral and bacterial respiratory care, including COVID-19, in the commercial population starting in March of 2020, and an increase in the Medicaid and Medicare populations beginning in July 2020.
At the start of the COVID-19 pandemic, emergency services were a top priority for patients and provider organizations. As provider organizations adapted their clinics to provide safe care to all patients and their staff, the provision of preventive care resumed in May 2020. Preventive care is important to identify disease in its earlier stages where treatments are more effective and recommended immunizations can prevent diseases. While preventive care rates were relatively stable in 2019, rates in 2020 indicate that the decrease during the early months of the COVID-19 pandemic were not fully addressed by the end of 2020.
Ongoing medical care for people with chronic diseases helps to develop skills and coping strategies that reduce complications and improve their quality of life. Based on the 15 chronic conditions used in this evaluation, all Wisconsin regions experienced a decrease in office visits for chronic disease management services in 2020. The graph below indicates that people with cancer had the smallest disruption in their services.
COVID-19 had minimal effect on the rate of behavioral health hospitalizations compared to 2019, but office visits fell quickly when the pandemic hit and did not return to pre-COVID levels. As shown in the graph to the right, telehealth helped to fill a portion of this gap. The WHIO’s March 2021 InfoByte on Telehealth indicated that behavioral health services are the most common use of telehealth in WI.

A deeper dive into inpatient and clinic visits for mental health conditions confirms that there was minimal change in these rates for all age groups except children. The rate of childhood hospitalizations and clinic visits for mental health conditions also demonstrates a seasonal influence in 2019 and 2020.

The COVID-19 pandemic required changes to everyday life such as social distancing and attending school from home. These changes can be stressful to adults and children. The graph on the left shows a prolonged peak in services for depression and anxiety in March-October 2020.
Insurance coverage in Wisconsin remained relatively stable throughout the COVID-19 pandemic despite a statewide economic slowdown that resulted in furloughs and layoffs. Medicaid enrollment increased in 2020 as existing Medicaid members remained eligible for benefits with many choosing to continue their coverage.

Scientific Note: The graphs and tables in this publication include 2019 and 2020 information so that pre-COVID-19 comparisons are available. Many of the rates are normalized rates using a per 1000 insured lives scale. Normalizing a rate provides a common scale which allows for averaging and makes it easier to compare results.

The WHIO would like to thank the organizations that submit their data to the WHIO. It is their commitment to improving the health of Wisconsinites and Wisconsin’s health care delivery system that has made this information possible.

For more information about the WHIO, please contact us at 608-442-3876 or info@whio.org.