

Impact of COVID-19 on the Utilization of Behavioral Healthcare Services in the US

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Introduction

- Behavioral health is how our habits define our mental and physical wellbeing. It studies emotions, biology, and behavior and how these affect one's mental health.
- Eating disorders, substance abuse, gambling, etc. are covered under behavioral health.
- It is estimated that 26% of people in the US who are 18 years and above suffer from a diagnosable mental disorder each year¹.
- COVID-19 had impacted healthcare utilization severely in the early stage of the pandemic. Focus on treating COVID-19 patients, social distancing, and lockdown measures drastically reduced routine and new visits to HCPs for non-urgent conditions. However, during the second half of 2020, mental health and behavioral issues became evident because of social distancing and disruption caused by the pandemic.

Objective

To study the impact of COVID-19 on the utilization pattern of behavioral health services.

Method

- In this study, Optum's de-identified US claims database was used to identify patients aged 18 years or above who were rendered behavioral services during 2019-2020.
- Members with behavioral health issues were identified using ICD-10-CM diagnostic codes (F code series). The utilization trend based on the average number of claims per patient was calculated for behavioral healthcare services.
- Results were stratified based on the place of service; insurance type – Commercial and Medicare; and regions.
- Wilcoxon Test was applied to analyze the level of significance of utilization change.

Results

- This study observed an overall significant increase of 4.2% in the average number of claims per patient, despite the lockdowns in 2020 (p-value 0.0001). In 2020, the month of May, August and October showed a slight decline in the average number of claims per patient from the same months of the previous year.
- In terms of place of service, the average number of claims per patient increased significantly for outpatient (35.8%), inpatient (6.8%), and emergency (4.1%). The ratio decreased significantly for office (-6.2%), and home health (-5.0%).
- For the Medicare population the average number of claims per patient increased by 3.4% whereas for commercial the ratio increased by 4.8%.
- Midwest, Northeast, South, and West region showed an increase of 3.9%, 6.4%, 2.6% and 4.3% respectively.



Reference: 1. Mental Health Disorder Statistics, The Johns Hopkins University

% change in average no. of claims per patient (2020 vs 2019) in behavioral services

Figure 1: Average number of claims per patient (2018-20)

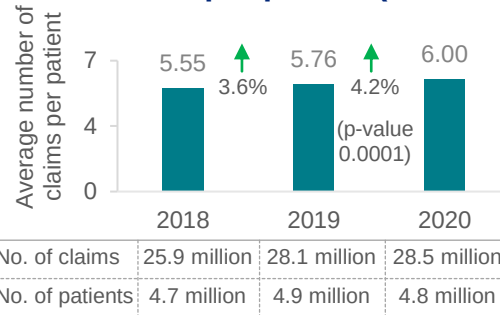


Figure 2: Month-wise change (2020 vs. 2019)

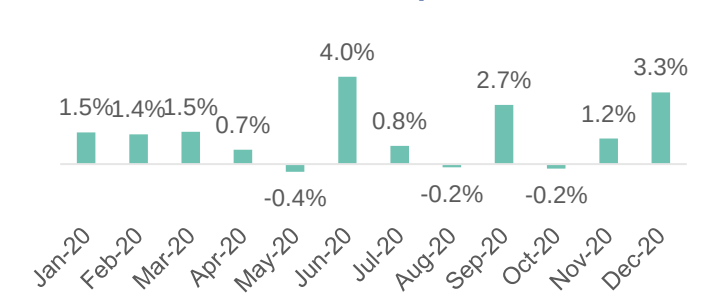


Figure 3: Change by place of service (2020 vs. 2019)

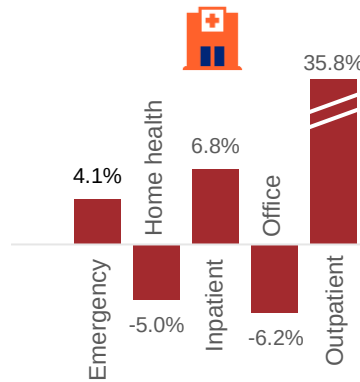


Figure 4: Change by insurance (2020 vs. 2019)

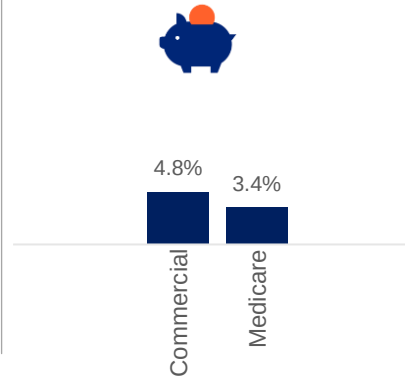
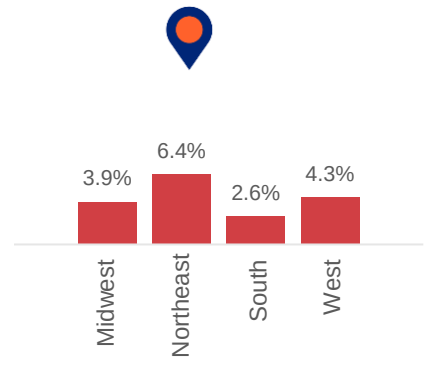


Figure 5: Change by region (2020 vs. 2019)



Conclusions

- Overall, the utilization of behavioral healthcare services in the US increased in 2020 because of mental distress. Month-wise a slight negative impact was seen from May, August, and October 2020.
- The increase in the average number of claims per patient increased for outpatients, inpatient, and emergency services, however, the number decreased for office, and home health. These differences may be due to the change in patient behavior and preferences for their healthcare needs due to the pandemic. More studies can be carried out to understand the driving forces behind this difference.
- The average number of claims per patient has increased for both commercial and Medicare insurance types and for all regions in the US, which is in line with the expectations.
- Further analysis of demographics and overall costs can be performed to see the full impact of COVID-19 on the utilization of behavioral healthcare services in coming years.
- Claims with unknown insurance types and regions are not considered for stratification.