



November 2020

# The Financial Impact of COVID-19 on Patient Payments

A "Stunted-V" Recovery of Payment Counts and Amounts, by Region

Medical Billers have been beset by the revenue effects of the novel coronavirus due to the closing and re-opening of physician and other medical offices, cancellation of non-urgent checkups, and the postponement of elective procedures. However, in 2020 through August, these impacts were not equally distributed, with billing volumes and related biller revenue recovering earlier and at higher levels in some regions than in others.

No matter the region, instead of an anticipated V-shaped recovery - even as the virus subsided during the summer months - patient payments were limited to a stunted-V recovery to only 80% of peak pre-pandemic levels.

As of this writing, virus spread has again increased which will have yet-to-be-determined implications. This paper analyzes data on patient payment counts and amounts nationally and in specific regions in order to identify patterns that can help billers better prepare for business impacts into 2021 in the wake of ongoing virus spread and related government restrictions.



## Introduction

Nationally, the impact of the COVID-19 outbreak and its resulting shutdowns was readily apparent when comparing data for 2020 with patterns in patient billing activity from prior years. When evaluating data on the amounts paid by patients and the counts of payments made by patients, there is a slight drop in March followed by a sharp decline in payment amounts and payment counts in April.

The pattern shifted on a national level in June, as both payment amounts and payment counts began rising and continued rising into July. Notably, however, payment amounts and counts then stagnated and never fully recovered.

The data suggest that regional variances in payment activity reflect not just the prevalence of the virus in the community but also the types of government restrictions implemented.

# Methodology

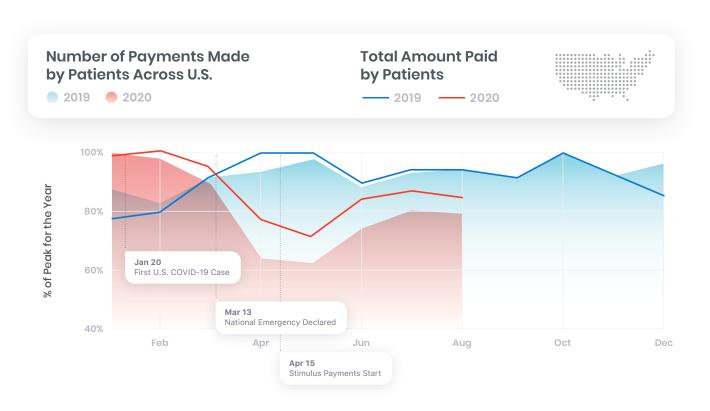
This analysis examined data on patient billing activity for several years from a dataset of billers and practices that have been consistently using Inbox Health's patient billing engagement platform. To ensure data integrity, a cohort analysis was used selecting only practices that had a positive count of payments for every month of the relevant time period, and a function was used based on the minimum, maximum, and mean to remove outliers.

Patient payment data for the months of January through August of 2020 was analyzed and compared to data from prior years. Monthly analysis allows for the seasonality (often driven by satisfying deductibles) of billing to be considered. For ease of comparison, 2019 data has been displayed, but 2019 trends are also reflective of earlier years for which data was available.

# Results

For this research, to explore the entirety of the patient payment dynamic, both the count of payments (Payment Count) which is the number of actual payments made by patients, and the amount of payments (Payment Amount) which is the actual dollar quantity received from patients were analyzed across the U.S.

It is important to note that payment count and payment amount do not always align, nor are they necessarily influenced by the same causes. For example, during robust economic conditions, a single statement is more likely to be paid-in-full. Conversely, in more difficult economic times, an offer of payment plans in recognition of economic hardship will result in more payment counts at smaller payment amounts. Finally, urgent visits for relatively minor patient concerns often lead to smaller bills than larger bills normally associated with elective procedures.



Payment activity began to drop significantly in March and then experienced a precipitous decline in April as many states implemented shutdowns and some practices suspended patient billing. As lockdown restrictions were progressively lifted in May, June, and July, patient payment activity began to recover.

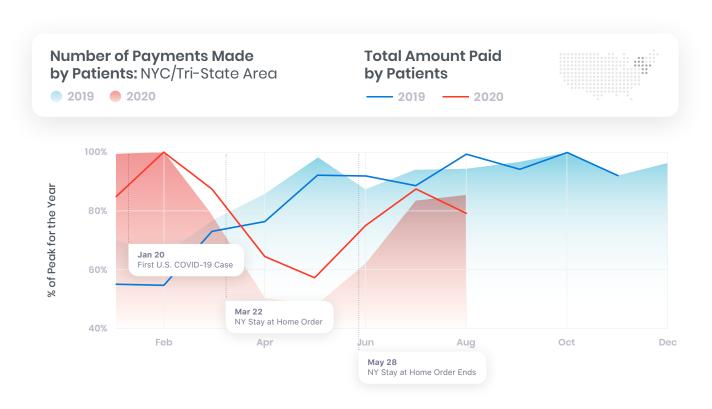
Comparing 2020 to 2019 brought the overall impact of the COVID-19 pandemic on the medical billing industry into stark relief. The pattern is similar to what has been observed in many other industries: a sharp decline in activity followed by a V-shaped recovery to prior highs. However, instead of a full "V" we see only a "stunted V", with the recovery leveling off approximately 20% below what would be expected if payments merely recovered to the levels seen at the beginning of the year - which is usually a low point in the yearly pattern of patient billing (as can be seen in the data from 2019).

Of note, the amount paid by patients began to decrease later than the count of payments, whereas the drop in April and May was more severe for the count of payments made. This may reflect the sharp decrease in the number of people visiting medical practices for any lower-cost, non-urgent purposes in those early months.

## **NYC Tri-State Region**

The NYC tri-state region (defined here as New York, New Jersey, and Connecticut), the region that experienced the earliest pervasive COVID-19 spread, was also the region observed to have had the most precipitous drop in payment amount and payment counts.

In this region, there were significantly higher payment counts and amounts paid during the first two months of 2020 compared to 2019, but that year-over-year growth completely disappeared in March. Payment amounts and counts then continued to fall until reaching a nadir in May. Both payment counts and amounts then rose sharply heading into June and continued rising into July, approaching but not quite reaching 2019 levels.

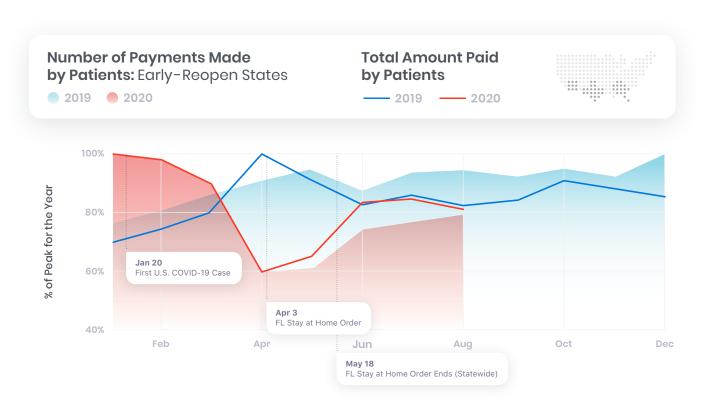


While the tri-state region pattern does resemble the national pattern on a superficial level, it is notable that payment amount, and to a lesser extent, payment count dropped to far lower levels. Earlier and stricter restrictions than in other regions, combined with greater reluctance of patients to visit medical offices, may explain this.

## **Early Reopen States**

"Early Reopen States" (defined here as Florida, Georgia, Alabama, Arizona, and Texas) were chosen as an analysis group because they experienced consistently high early virus rates and related government restrictions which were then aggressively relaxed faster than the NYC tri-state region.

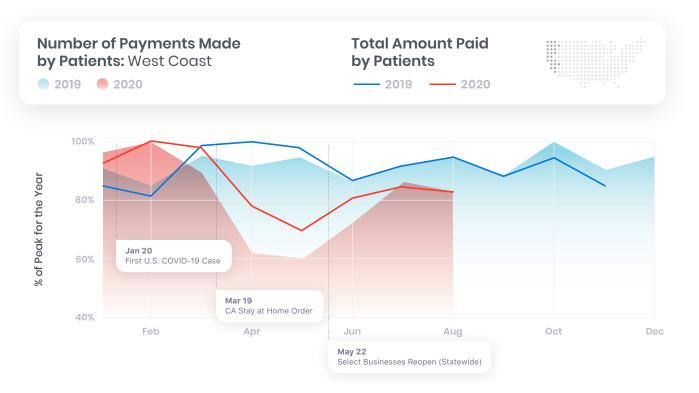
In contrast to the tri-state region, these states experienced a slightly later reduction in payment count and amounts and a much earlier rebound in both. Unlike in the tri-state region, payment counts did not exceed payment amounts level and both metrics have experienced the same "stunted V" recovery to only 80% of pre-pandemic levels.



# West Coast

West Coast states (defined here as California, Oregon, and Washington), while not experiencing the same levels of virus spread as the NYC tri-state region in the early stages of the pandemic, nevertheless enacted similar restrictions along a similar timeline.

Unlike the NYC tri-state or Early Reopen states, patient payment amount and payment count never dropped below 60% of peak levels for any month. Nevertheless, payment activity for the region experienced the same "stunted V" recovery to only 80% of pre-pandemic levels.

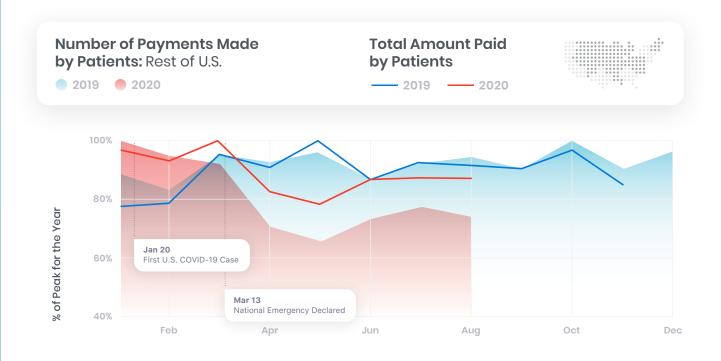


#### Rest of the U.S.

For completeness, U.S. states not considered in any of the above regions were also analyzed.

For these states, payment counts and payment amounts decreased somewhat later and with significantly less severity than the other regions analyzed, with payment amount in particular never dropping to the same degree as it did in the other regions.

That said, while the total amount paid by patients did recover to above 80% of normal levels by June, the count of payments made by patients actually remained more severely depressed than in many other regions of the country, and in no month did it recover to 80% of the peak count.



# Side-by-Side Regional Analysis

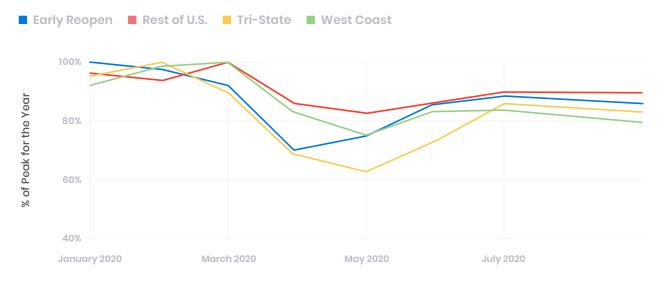
When comparing regions of the U.S. side by side, the difference in the magnitude and timing of these drop-offs becomes even more apparent. Normalized to the peak monthly payment amounts and counts for the year, the NYC tri-state region stands out as having been most profoundly impacted by the virus. The region experienced the deepest drop off in payments, and it saw payment amounts and payment counts remain severely depressed for far longer than in any other region.

It is also notable that the early reopen states stand out compared to the West Coast and the Rest of the U.S. in having a sharper drop off in patient payment counts and amounts in March and April before beginning the stunted-V shaped recovery pattern as early as May, while all other regions continued to drop in May and only began to recover in June.

# Number of Payments Made by Patients



# **Total Amount Paid by Patients**



#### Conclusion

As 2020 began, the practices in this analysis were well-positioned for year-over-year patient billing growth, with payment amount and count levels in the first quarter of 2020 significantly greater than those of 2019. However, despite some recovery in June, recovery levels never reached pre-COVID-19 highs. This suggests there is still a risk of a W-shaped recovery over the longer term.

Regionally, there were considerable learnings from how lockdown guidelines and COVID-19 cases impacted the ways in which payment counts and payment amounts rebounded.

- The most significant impact of the pandemic was seen in the tri-state region, which saw the steepest and longest drops in payment amounts and payment counts.
- The difference in pattern between Early Reopen states and West Coast states highlights the differential impact of virus spread versus shutdowns, with viral spread causing earlier drops in payment activity in Early Reopen states, while stricter and longer lockdowns caused payment activity to remain depressed on the West Coast for a full month longer despite lower levels of viral spread.
- The pattern for the Rest of the US reveals the continued spread of COVID-19 into new regions of the country, with non-highlighted regions experiencing less impact in the first half of the year but beginning to show a new drop in activity towards the end of the summer.

No matter the region, planning for the end of 2020, and looking ahead to 2021, practices should prepare for a decrease in payment counts and payment amounts to only 70-90% of pre-pandemic patient revenue levels until COVID-19 is contained.

Mitigation strategies should be considered including helping practices with improved collection rates (e.g. payment plans, better patient communication), reducing patient billing-related labor costs (e.g statement review and posting), and reducing fixed expenses (e.g. yearly leases, annual software fees). Looking ahead as the virus is contained, if 2019 and earlier data is indicative, billers can expect to see patient payment counts and amounts meet and conceivably exceed those of 2019.

#### **About Inbox Health**

Inbox Health is transforming medical billing one patient at a time with personalized and intelligent interactions that deliver a clear and convenient billing experience for every patient. The company launched its operating system for billers in 2018, since then. Inbox Health has quickly become the industry standard for medical billers and practices that want to increase collections and shorten revenue cycles while reducing administrative costs. Inbox Health is a venture backed software company supporting billers across the United States. The Inbox Health platform automates the patient communication process using bi-directional correspondence, proprietary algorithms, machine learning and artificial intelligence so every patient understands their medical bills and has access to different payment mechanisms. and medical billers and providers achieve optimal patient receivables.

Inbox Health Labs / Inbox Health's rapidly growing proprietary data set of over 30 million unique patient bill payment interactions provides a trove of potential insights. Inbox Health Labs strives to provide valuable research to the medical biller community by analyzing the data to discover key findings that are topical to prevailing and emerging trends in the industry as well as changes that are the consequences of the major events of the day.

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