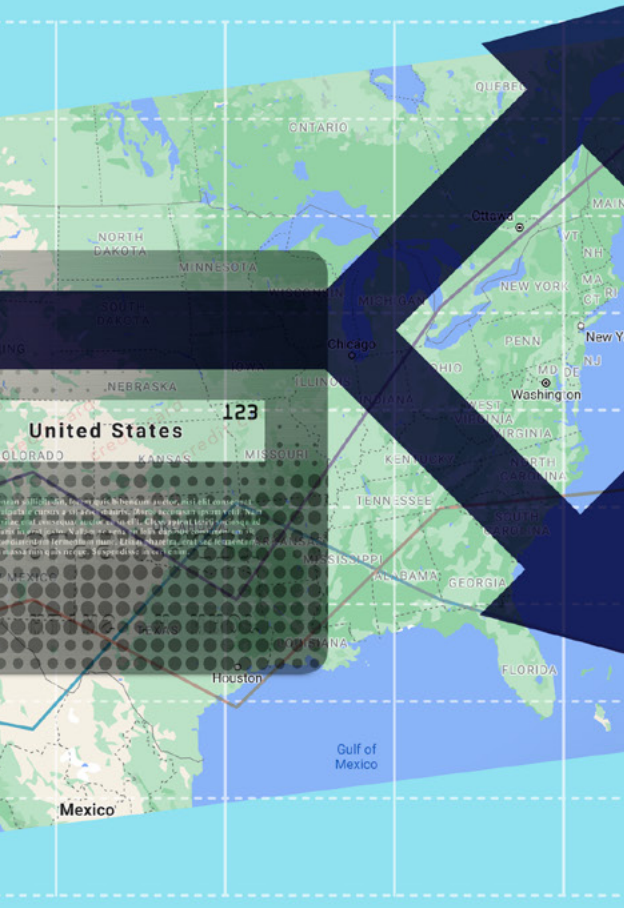
inboxhealth / LABS

March 2021

A K-Shaped Recovery For Medical Billing: **Is Practice Resilience Determined By Local Community Affluence?**



Research indicates that an enduring impact of the COVID-19 pandemic will be the acceleration of pre-existing trends towards digitization and automation and a k-shaped recovery in which different segments of society experience radically different trajectories as a result of structural changes in the economy that were induced by the crisis.

This report analyzes whether this pattern reflects the experience of the medical billing community, specifically as a function of the median household income of the city or town in which a practice is located. This information can be of great value to billers and practices to predict and plan the best strategies for their business as the economy recovers.

The sharply divergent outcomes for practices based on the affluence of the communities in which they are located suggests that managing all patients the same in regards to patient billing is problematic and segmented strategies are a necessary approach for optimal business success.

Introduction

A core challenge for the medical billing industry in adapting to the COVID-19 economic consequences has been the inconsistent way in which it has impacted life for billers and practices across different locations, medical specialties, and periods of time. While some have been inundated with COVID-19 patients or testing, others have had to rapidly adapt to near-total reliance on telehealth, and others have seen business slow almost to a halt.

It is of urgent concern for billers and their practices to understand the nature of these shifts. In the short-term, significant cost and revenue impacts were inevitable as disease spread altered treatment demands and the recession altered patients' ability to pay. However, a growing body of economic research indicates that the pattern of growth coming out of this recession will resemble what is known as a k-shaped recovery.

Unlike typical business cycles in which growth is punctuated by a recessionary period that slows the economy as a whole for a time, a k-shaped recovery produces structural changes in society that disrupt the business environment for individuals and companies in ways that persist long after the crisis is over. These changes may accentuate or disrupt the direction of pre-existing trajectories towards change.

This report examines the relationship between the affluence of a community and the experience of medical practices in terms of the amount and dollar value of the treatment patients are receiving and the amount and dollar value of payments they have been able to collect from patients, with the intent of evaluating whether the k-shaped recovery pattern is reflected in patients paying medical bills versus accumulating unpaid medical bills.

Methods

Proprietary data on patient billing activity for medical practices located across the United States was analyzed over a 2 year period leading up to and during the COVID-19 pandemic. To ensure data consistency and avoid confounding variables, only data from practices using the Inbox Health platform for the entire duration of the period analyzed were considered.

Cohort analysis was performed to ensure that practices had registered payments and invoices for every month from January 2019 to December 2020. Clear outliers were identified and removed.

Income groups were determined using standard definitions from Pew Research, which defines **lower income** households as those with incomes below $48,500, **middle income** households as

those with incomes between $48,500 to $145,500, and **upper income** households as those with incomes above $145,500.

It is important to note that invoices and payments occur on a slightly different time scale relative to treatment. On average invoices are sent about 2 weeks after treatment, and payments occur about 2 weeks after invoices are sent.

Invoice data can therefore be better reflective of visits and drop in response to patients making fewer visits to the doctor, whereas payments drop slightly later because patients typically still pay for earlier treatments. Payment data is also strongly affected by ability to pay, whether the payment is made immediately in full, in time over a payment plan, or not at all.

It is also key to distinguish between **payment/invoice count** and **payment/invoice amount**. The count or number of payments made by patients (or invoices billed to patients) does not take account of the total value of such payments or bills, so this statistic could be elevated by a large number of low-value payments or treatments.

For example, a patient on a payment plan might make many small payments, resulting in an elevated count for the period billed for. The full cost of the treatment would show up immediately in the invoice but the amount paid would be spread out over a period of time equivalent to the length of the payment plan.

Payment plans are more likely for very expensive bills and when patients are less wealthy or have short-term impairments in their ability to pay (e.g. unemployment).

Results

Payment Volumes:
Patient payment count fell precipitously for all groups starting in April 2020, with the greatest decline occurring in upper income communities.

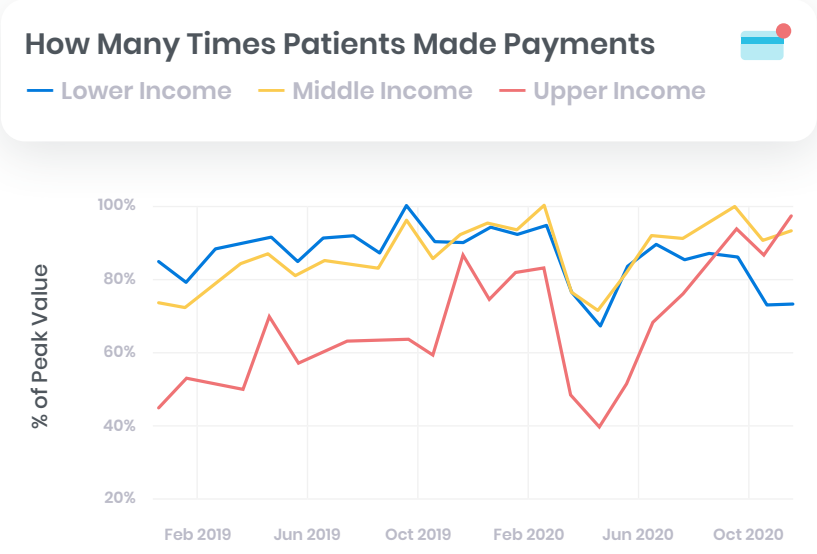
Patient payments reached their nadir across all income cohorts in May 2020.

Recovery occurred swiftly across all income groups from May to September of 2020; however, the initial rebound was more robust for practices in lower and middle income communities.

These practices reached 80-85% of their pre-pandemic peak in June and 90-96% by July. By contrast, practices in upper income communities only recovered to 57% of pre-pandemic levels in June and 77% by July.

After September the pattern diverged again. In upper income communities payments rose from 97% of peak pre-pandemic levels in September to 113% in December. In lower income communities payment volumes fell from 87% of peak pre-pandemic levels in September to 72% in December.

In middle income communities payment volumes were relatively consistent from July to December, ranging from 94% to 103% of pre-pandemic peak levels.

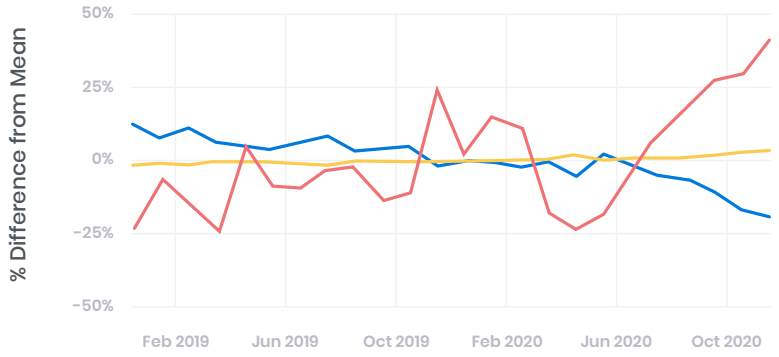


Payments to practices in lower income communities became a progressively smaller component of total payment volumes, and this trend was largely uninterrupted by COVID-19. Payment volumes from June to December averaged 91% of pre-pandemic levels.

Payments to practices in upper income communities saw the greatest drop as a percent of all payments during the acute lockdown period, but the trend before and after the lockdown shows robust growth. Payments from June to December averaged 129% of pre-pandemic levels.

How Many Times Patients Made Payments

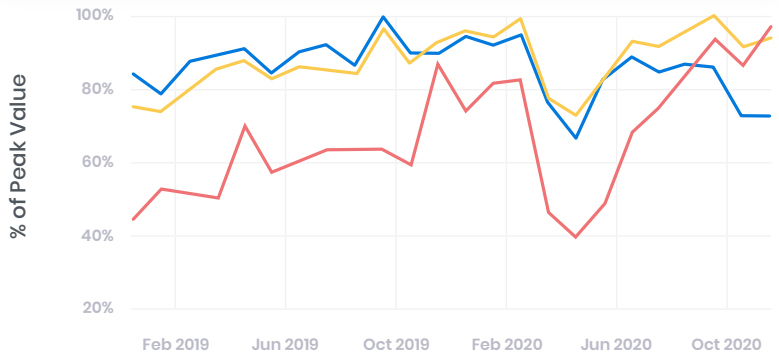
Lower Income — Middle Income — Upper Income



Practices in middle income communities saw relatively little deviation from their average percent of all payments over the time period analyzed. Payment volumes from June to December averaged 108% of pre-pandemic levels.

How Much Patients Paid

Lower Income — Middle Income — Upper Income



Payment Amounts:
The magnitude and timeline of changes in payment amounts was essentially the same as for payment volumes.

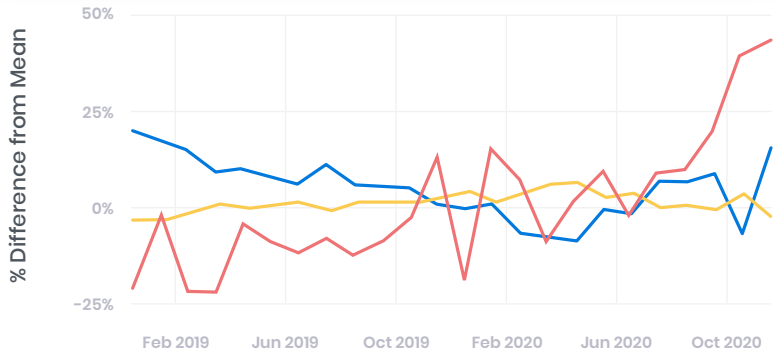
Compared to payment volumes, the drop in payment amounts relative to the pre-pandemic average was less differentiated across practices in communities of different affluence levels. Payment amounts dropped to between 66% and 76% of the pre-pandemic peak for each group.

The major shift occurred for practices in upper income communities from September to December. In September practices across all groups had recovered to 105% to 110% of their pre-pandemic peak, but by December practices in upper income communities saw payment amounts rise to 146% of pre-pandemic peak levels and 198% of average levels from January 2019 to February 2020.

The other significant trend was a slight tendency for practices in lower income communities to capture a progressively smaller share of total payment volumes over the course of the 2 year period analyzed, and this trend predated the pandemic.

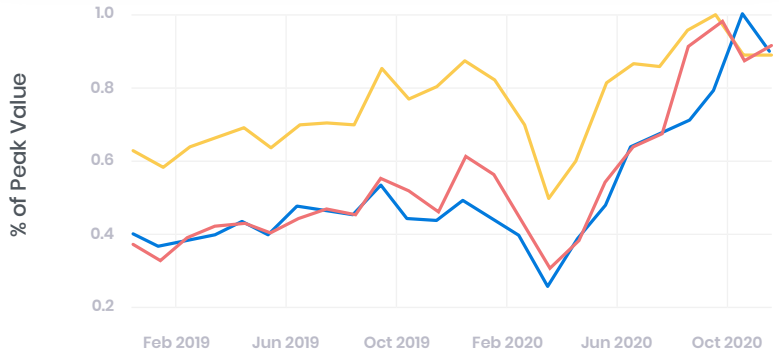
How Much Patients Paid

Lower Income — Middle Income — Upper Income



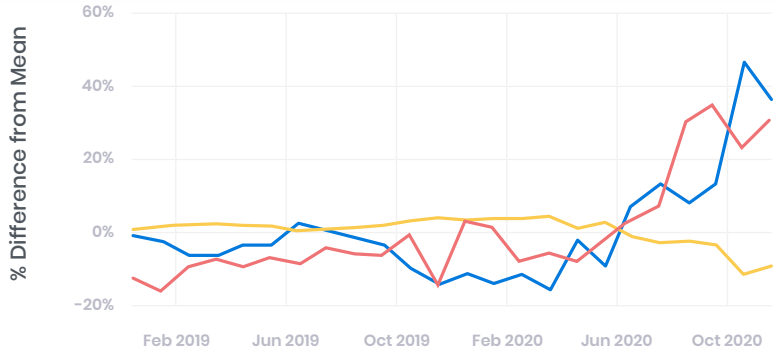
How Many Times Patients Were Billed

Lower Income — Middle Income — Upper Income



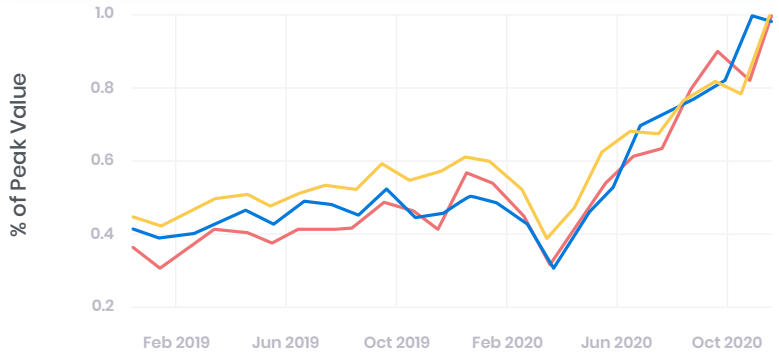
How Many Times Patients Were Billed

Lower Income — Middle Income — Upper Income



How Much Patients Were Billed

Lower Income — Middle Income — Upper Income



Invoice Volumes:
Across all income groups, the number of bills sent to patients fell progressively from February to April of 2020. Invoice volumes reached their lowest levels in April, averaging 60-70% of average pre-pandemic levels and 50-60% of the prior peak.

Invoice volumes rebounded swiftly from April to October, reaching at least 100% of the pre-pandemic average for all groups by June and at least 99% of the pre-pandemic peak by July.

Invoice volumes grew significantly for all groups over the course of 2020 following the acute lockdown period. However, the growth was significantly greater for practices located in lower income and upper income communities. By December 2020 invoice volumes reached 163% of the pre-pandemic peak in lower income, 146% in upper income, and 102% in middle income communities.

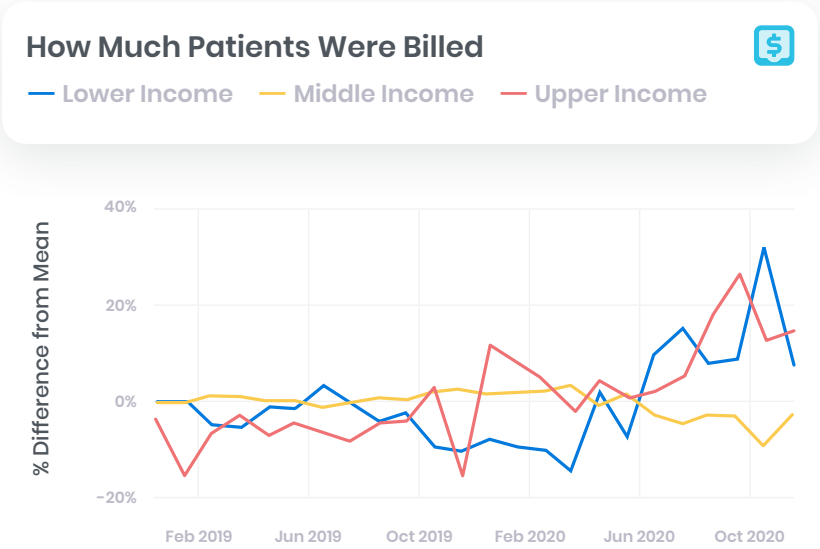
Practices in lower and upper income communities sent a progressively greater percentage of all bills during the period from July to December of 2020, with invoice volumes reaching 196% and 191% of the pre-pandemic average respectively. Practices in middle income communities saw much less change, with invoice volumes reaching 123% of the pre-pandemic average.

Invoice Amounts:
Amount billed to patients fell for practices in communities of all affluence levels from February to April of 2020. It then rebounded swiftly and progressively for every month from April to July at a similar rate across all income groups.

By July invoice amount reached 132% of the pre-pandemic peak in lower income, 131% in middle income, and 142% in upper income communities.

Invoice amounts grew significantly more in upper and lower income communities; however, the difference in invoice amount growth was less significant than the difference in invoice volumes.

All groups billed at 90-100% of their pre-pandemic average by May and 115-125% by June. Growth accelerated faster from July to December 2020 in upper and lower income communities, reaching 219% and 229% of their pre-pandemic average respectively. However, growth was still significant for practices in middle income communities, reaching a peak of 192% of their pre-pandemic average in December 2020.



Discussion

This data provides strong evidence of a k-shaped recovery for the medical billing industry. Patient payment activity and invoices billed to patients were significantly and differentially impacted by the affluence of the community a practice is located, and the difference grew more significant rather than diminishing over time.

The data reported here may help explain the pattern of a "stunted V-shaped recovery" identified in a previous Inbox Health Labs report published in November of last year.

Practices in communities that were doing well before the pandemic are seeing something resembling a "V-shaped recovery". For these practices, life may not have fully returned to normal, but a "new normal" has emerged in which patients are being billed for treatment and paying for that treatment at a rate greatly exceeding what was seen prior to the pandemic.

Practices in lower-income communities face a much different reality. These practices saw the same drop in patient billing and payment activity during the early lockdown period, and a slight recovery thereafter.

However, through the end of 2020 patient payments began to decline again even as bills sent to patients increased dramatically.

Previous reports have documented how some billers have been able to successfully grow their business during the pandemic through a combination of close collaboration with their clients and proactive use of technology, and how negative effects of the pandemic can be mitigated by adopting effective strategies and best practices.

This data does not examine the relationship between community affluence and practice adoption of modernized technology for patient engagement. However, the finding of a k-shaped recovery indicates that companies which successfully incorporate software into their recovery strategy will see a more vigorous rebound from the economic downturn, while companies that fail to adopt innovative solutions will see steep costs of inaction, which may include persistent malaise.

Billers serving practices in upper-income communities that are not already seeing robust revenue growth may want to consider what opportunities they might be missing.

Patients may have questions about their bills that they are unable to get answered with offices closed, or bills may not be reaching patients in a format that makes payment easy, fast, and convenient no matter how patients' lives may have changed. To adapt, it may be necessary to implement new digital payment options, telehealth services, patient payment plans, and more flexible and sophisticated patient communication technology.

Practices in lower-income communities may face continued thin margins, and with many of their

patients facing economic hardship, it will be important to offer every possible option to facilitate patients' ability to pay, including patient payment plans so patients who may not be able to pay in full upfront can commit to a predictable future revenue stream.

Cost-revenue gaps can be mitigated by adopting low-cost chat and automated communication technologies to field patient questions about bills, and enormous time and labor savings can be achieved with automated digital bills and automated check handling.

Previous research by McKinsey and BDO has documented that COVID-19 is accelerating a pre-existing shift towards digitization and automation in the economy. Many traditional and inefficient ways of doing business that could be overcome with continual hard work prior to the crisis are increasingly becoming unworkable. Meanwhile, individuals and firms that may have been reluctant to change prior to the crisis are now seeing the benefits of digital technology and are unlikely to go back.

The reality of the past year has born out such predictions in the healthcare space especially. The urgency of embracing change to prepare for the new economy has therefore never been more evident. Practices and the billers that serve them should view strong performance relative to their community's income level as an opportunity for growth, while those that are struggling or underperforming compared to other practices in similar communities must make the necessary adaptations to thrive in the new economic reality.

About Inbox Health

Inbox Health is changing the way people think about patient billing. The company's patient billing communication platform helps medical billing teams streamline patient engagement and support while creating exceptional consumer experiences.

Using Inbox Health's data-driven platform, billers easily automate and personalize patient communication, providing consumers increased clarity and confidence around charges and more convenient payment options which dramatically improves profitability, collection rates and speed to payment.

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.

Learn more at **inboxhealth.com**

inboxhealth / LABS