COVID-19 Weekly Trend Insights

Data Week Ending April 10th, 2020
Compiled on April 16th, 2020
Executive Summary

COVID-19 Treatment

- A new treatment candidate, Ivermectin, drove a spike in Rx Activity in the Anthelmintics (antiparasitic drugs) USC category due to an increase of scripts among ages 40-59. (Ivermectin is a decades old drug typically used in the treatment of head lice)

Office Visits

- Although telemedicine activities have surged in recent weeks, the increase does not offset the overall decline seen with office visits.
- Looking at COVID-19 patient activity, the majority of exposed cases continue to be diagnosed via Office visits. Confirmed COVID-19 cases are predominantly diagnosed via in-patient hospital visits.
- Claims analysis over the coming weeks will evaluate Telemedicine trends by Physician Specialty.

Payer Behaviors

- Patient abandonment is down in recent weeks. However, early observations of claim volumes for week ending 4/10/2020 indicate a potential rise in payer restrictions.
- Approved claims covered by assistance programs increased by ~6% with 4/10/2020.
- Rejections due to exceeded plan limitations have increased by 55% as of week ending 4/10/2020. Refill barriers continue to be the driver of most payer rejections.
Executive Summary (Pg 2)

Therapeutic Area Impacts

- Fewer patients are initiating therapy on new brands across key therapeutic areas (Oncology, Immunology, Cardiology, Diabetes, Antivirals). Medically administered therapies have seen drops from 5-33% across brands compared to the 2019 baseline.
- There has been little change in the average time between Rx fills for key therapeutic areas.
- Average Days Supply for Immunology and Oncology are up approximately 5% over pre-COVID-19 levels.

Other Rx Trends

- Overall antimalarial prescription trends plateaued with week ending 4/10/2020 as payers continued to enforce tighter restrictions on dispensed quantities to manage demand.
- “Elective Therapies” continue to drop further below historical thresholds with week ending 4/10/2020.
- National prescription volumes are continuing to drop lower across all channels. However, Mail order activity is still trending 4% above normal thresholds.

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Latest COVID-19 Events
COVID-19 Weekly Trend Insights
Week Ending April 10, 2020

Timeline: Latest COVID-19 Developments

March 30th
FDA authorizes antimalarials for emergency use despite limited evidence as viable COVID-19 treatments

March 31st
Wall Street ended one of the worst quarters in stock market history, reflecting the devastating impact of the pandemic

April 7th
The CDC removes hydroxychloroquine as a recommended COVID-19 treatment

April 16th
The U.S. Department of Labor reports over 5.2 million Americans lost their jobs in the past week, bringing the total of unemployed up to 22 million

April 16th
President Trump announced new federal guidelines to ease social distancing orders

Sources:
https://fortune.com/2020/04/16/us-unemployment-rate-numbers-claims-this-week-total/
https://tradingeconomics.com/united-states/unemployment-rate
COVID-19 INSIGHTS

Confirmed Cases Worldwide

- Since last week's COVID-19 insight report, Global cases have increased by over 677,000 cases or approximately 45%.
- Over 485,000 cases have been noted as recovered, increasing by over 181,000 cases or nearly 60% since last week’s COVID-19 insights report.

Confirmed Cases 2,167,955

Deaths 146,055

Recovered 485,022

Source: https://www.theguardian.com/world/2020/apr/01/coronavirus-world-map-countries-most-cases-and-deaths
COVID-19 INSIGHTS

Confirmed Cases in the USA

- Confirmed cases of COVID-19 increased by over 3,459 from April 16th, 2020 to April 17th, 2020, representing an increase of roughly 1%.
- Georgia is no longer on the Top 10 list for confirmed cases (replaced by Texas).
- Louisiana has seen a slow down in cases as they dropped from 5th highest (from last weeks COVID-19 report) to 9th, with an increase of 5,502 cases.

<table>
<thead>
<tr>
<th>State/Territory</th>
<th>Confirmed Cases</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>223,691</td>
<td>14,832</td>
</tr>
<tr>
<td>New Jersey</td>
<td>75,317</td>
<td>3,518</td>
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<td>Massachusetts</td>
<td>32,181</td>
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<td>Michigan</td>
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<td>Florida</td>
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<tr>
<td>Texas</td>
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<td>429</td>
</tr>
</tbody>
</table>

Highlight:
New Treatment Candidate
Ivermectin, a decades-old drug approved to treat head lice infections as well as the treatment of some parasitic worms, inhibited the SARS-CoV-2 within 24 to 48 hours of treatment.

While other non-essential markets continue to decline with week ending 4/10/2020, Anthelmintics (antiparasitic drugs) saw a spike in activity due to an increase of Ivermectin scripts among ages 40-59.

Although COVID-19 is not a parasitic disease, the laboratory tests showed that the drug targets the disease like one.

Telemedicine & Office Visit Trends: All Patients vs. COVID-19 Cohort
Although telemedicine activities have surged in recent weeks, the increase does not offset the overall decline seen with office visits.

The majority of patients with exposure to COVID-19 are diagnosed in physician offices.

Confirmed cases are predominantly diagnosed via in-patient hospital visits.
Payer Behaviors During Pandemic

Summary of Rejected & Reversed Claims
Payment Type Shifts with Approved Claims
Changes in Reject Reasons
Patient abandonment is down in recent weeks. However, early observations of claim volumes for week ending 4/10/2020 indicate a potential rise in payer restrictions.

Baseline = 8 Week Average from 1/3/2020 - 2/21/2020
While overall approval rates and volumes for claims covered by Commercial, Medicare, Medicaid, and Managed Medicaid remain relatively similar compared to February, approval rates have increased for claims associated with Assistance Programs.

Approved claims covered by assistance programs increased by ~6% with 4/10/2020.

In mid-February, ~75% of cash prescriptions were paid for by cash. By week ending 4/10/2020, ~87% of prescriptions were paid for by cash.
Since COVID-19’s influence on all prescription trends took off in early March, rejections due to exceeded plan limitations have increased by 55% as of week ending 4/10/2020. Refill barriers continue to drive the majority of payer rejections.

Although DUR rejections are down 17%, instances of pharmacists being unable to override DUR rejection codes have increased compared to early March.
Highlight: Therapeutic Area Impacts
Patient New to Brand, Time to Fill, & Days Supply Trends
COVID-19 INSIGHTS

Overall Trends in New Claims

• With overall prescriptions on the decline, there may be long-term implications for patients with chronic conditions who are not getting the level of care they were receiving prior.

• The delay in care may exacerbate existing conditions, resulting in a potential surge of non-COVID patients requiring emergency treatment in the coming weeks.

Other Sources: [FierceHealthcare, April 8, 2020] ERs have been quiet during COVID-19. What happens when the patients come back?

The percentage of new prescription claims have reached their lowest point in YTD 2020 with week ending 4/10/2020.
COVID-19 INSIGHTS

Fewer Patients are Initiating Therapy

- Fewer patients are initiating therapy on new brands in most therapeutic areas.
- Antiviral new to brand is down 78% compared to the baseline last year.
- The drop is also severe among medically administered drugs, dropping 5-33% compared to the baseline last year.

Index = Current Year vs. 13 Week Rolling Average (from the same time in 2019)
With the exception of antimalarials, there has been little change in the average time between Rx fills for key therapeutic areas.

Medically administered products for oncology or immunology show no appreciable decline, but products in other therapeutic areas have decreased by 5-10 percentage points compared to the baseline in 2019.

Time to Fill for antimalarial prescriptions has doubled as the demand for hydroxychloroquine spiked.

COVID-19 INSIGHTS
Market Summary: Average Time to Fill

Index = Current Year vs. 13 Week Rolling Average (from the same time period in 2019)
COVID-19 INSIGHTS

Market Summary: Average Days Supply

• Immunology and Oncology are up approximately 5% over pre-COVID-19 levels.

• Average days supply for Antivirals has increased by 75% during the same time period.

• Antimalarials have seen a significant drop in the average days supply, dropping over 25% from its pre-COVID-19 levels.

Shifts in days supply occurred approximately around the same time most states went into lockdown mode.
Channel Distribution Behaviors: Retail vs. Mail Order
National prescription volumes are lower in all channels compared to the prior week ending 4/3/2020.

Retail activity is down 2.3%, dropping even further below 2019 thresholds.

Retail activity for new prescriptions is down 4.1%, indicating a lower new-to-fill ratio for the week since NRx volume decreased at a faster rate than TRx volume.

Mail Order is down 3.7%, but is still ~4% above normal.
Market Analyses

Directly Influenced by COVID-19:
- Antimalarials
- Immunology
- Respiratory Therapy

Other Markets (indirect influence)
Markets Directly Influenced by COVID-19

• Overall antimalarial prescription trends plateaued with week ending 4/10/2020 as payers continued to enforced tighter restrictions on dispensed quantities to manage demand.

• The time between refills also increased with demand, averaging 10 days vs. 5-6 days in prior weeks.

• Despite the subsequent wane in demand following week ending 3/20/2020, there has not been a corresponding decrease in the time to fill.

• Overall antimalarial trends may decline further in successive weeks as the CDC removed Hydroxychloroquine as a recommended COVID-19 treatment on April 7th.
Immunology prescriptions for all ages continue to decline. TRx Units still remain above historical thresholds.

- Payer rejection rates for immunologic agents is ~10% with week ending 4/10/2020 (an increase of +2%), but the current week's volumes may shift further due to a lag in claims reporting.
- Rejections for the current week continue to be driven by refill restrictions, prior authorization requirements, and product/service not covered.
Respiratory therapies for all ages continue to decline, although TRx Units still remain above historical thresholds.

- The payer rejection rate increased to into week ending 4/10/2020 to 8% (+1% based on an initial snapshot – the rejection rate may change due to a lag in claims reporting).
- Like immunology, increases in rejection rates are being driven by refill restrictions, prior authorization requirements, and product/service not covered.
“Elective Therapies” continue to drop further below historical thresholds with week ending 4/10/2020, even more so when compared to the same week in 2019.