COVID-19 Bi-Weekly Trend Insights

Data Week Ending 5/22/2020
Compiled on 6/4/2020
Executive Summary

COVID-19 in the News & Latest Trends

- Since our last insight report was published, global cases reported have increased by 32%.
- The PRA/SHS COVID-19 Patient Cohort that is tracking Diagnosed, Tested, Exposed, and Symptomatic cases is now actively monitoring patient history and claims activity for over 2.1 million patients. Which has increased our sample size for analysis by 500k since our last report. We are also now tracking a confirmed Diagnosed patient cohort of more than 137,000.
- Of Patients with a confirmed COVID-19 Diagnosis, 43% have had at least one hospitalization, with the average Length of stay being 7-8 days
- 82% of hospitalizations due to COVID-19 were in Patients age 50 and older
- Hypertension, hyperlipidemia and Type 2 diabetes continue to be the most common chronic comorbidities observed in patients diagnosed with COVID-19 infections.

Deep Dive Highlight: Oncology

- We profiled six different types of Cancer in our deep dive: Pancreatic, Multiple Myeloma, Chronic Myeloid Leukemia, Breast, Prostate, and Non-small cell lung cancer
- Oncology specific screenings yielded significant declines during the peak COVID-19 pandemic period with signs of bounce back beginning in late April.
- Oncology patient visit volume during the pandemic varied greatly by tumor type. The severity of disease appears to be a major contributing factor with Pancreatic cancer seeing the smallest decline.
- The rate of patients initiating therapy for infused products has remained largely unchanged from 2019 levels. CML is the only cancer type to show a significant drop with a 50% decline in Mid-March.
- Both Hematologic malignancies and solid tumors typically have increases in Rx volume in Feb/Mar timeframes, but the onset of COVID-19 Stay-at-Home orders drove an observable decline in RX volume.

General Market Pulse

- Overall telemedicine trends are starting to show evidence of decline while patient office visits volume continues to increase.
- Oncology and Psychiatric specialties have resumed normal reporting thresholds compared to the prior year. Pediatric office visits are still down by 40% compared to 2019 levels.
- Telemedicine use for Commercial and cash payers has started to decline after spikes in early stages of the Pandemic.
- Both Medicare and Medicaid adoption of Telemedicine has been swift and both are trending more than 10x higher than Pre-COVID levels.
- In key markets we monitor weekly, Anti-viral and Immunology new prescriptions trends are starting to increase. Cardiology is now just 1% shy of Prior year thresholds.
- Unlike other markets, new prescription activity for respiratory therapies are not yet showing signs of recovery.
- Assistance Program usage continues to report 19% above prior year thresholds while “cash” scripts remain -14% below 2019 volumes.
- Retail TRx continues to report -7% below 2019 volumes. Mail Order activity is within -3% of normal reporting thresholds as of week ending 5/22/2020.
• COVID-19: Current Events & Latest Trends: 4-11
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  – COVID-19 Patient Monitoring
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  – High-Value Markets + Select Elective Therapy Monitoring
  – National / Pay Type / Channel Summaries
COVID-19: Current Events & Latest Trends

- COVID-19: Current Events
- COVID-19 Patient Monitoring
COVID-19 Weekly Trend Insights
Week Ending

May 29th
President Trump announced he was halting U.S. funding and membership in WHO over its response to China’s handling of the coronavirus epidemic.

There are mixed opinions on this decision and global health experts said the president’s choice to leave the global health governing body during a pandemic is a dangerous call.

Wisconsin is the first state to open bars without any preventive measures. Wisconsin has since seen some of its highest single-day new case counts of coronavirus, with deaths and hospitalizations also rising just two weeks after the WI Supreme Court struck down the governor’s stay-at-home order (on May 13th).

May 30th
The U.S. opened a new era of human space travel as a private company launched astronauts into the first time orbit. Two American astronauts lifted off from the same Florida launch pad that once served Apollo missions and the space shuttles. The rocket and capsule were a new sight for many – built and operated not by NASA but SpaceX, the company founded by billionaire Elon Musk to pursue his dream of sending colonists to Mars.

May 31st
The largest percentage increase in new coronavirus cases came in a collection of rural counties generally far away from metropolitan areas.

The top 10 counties for new case growth ranged from the forests of West Virginia to the farms of Iowa to the mountains of Oregon. Data research indicates that rural areas are less equipped to deal with outbreaks.

June 1st
Epidemiologists say after days of mass demonstrations and protests over the death of George Floyd, the U.S. will see a rise in coronavirus infections. Protests drew massive crowds in cities across the country over the weekend at a time when people are being encouraged to avoid large gatherings and stay at least 6 feet apart.

Sources:
https://www.npr.org/sections/goatsandsoda/2020/05/29/865816855/whos-muted-reaction-to-trumps-pledge-to-withdraw-u-s-from-the-u-n-agency
Global cases continue to rise as COVID-19 cases surge in Latin American countries. Brazil & Mexico have yet to “flatten the curve” for confirmed cases.

Since our last COVID-19 insight report on May 22nd, global cases have increased by approximately 1.6 million or 32%.

Global recovered cases reached over 2 million, increasing by nearly 52%.

Confirmed Cases

6,643,081

Deaths

391,115

Recovered

2,036,957

Source: https://www.theguardian.com/world/2020/may/07/coronavirus-world-map-which-countries-have-the-most-cases-and-deaths
COVID-19 INSIGHTS

Confirmed Cases in the USA

• As state re-openings continue, confirmed cases of COVID-19 increased by nearly 300,000 from May 21st to June 4th, representing an increase of roughly 19%.

• Since the last Insights Report, California has garnered nearly 33,000 new cases, representing a 40% increase (the most among any top 10 state).

• New York & New Jersey observed single digit growth in confirmed cases (lowest among top 10), even though New York increased testing by 48% and New Jersey by 58%.

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<thead>
<tr>
<th>State/Territory</th>
<th>Tests</th>
<th>Test % Change</th>
<th>Confirmed Cases</th>
<th>Case % Change</th>
<th>Deaths</th>
<th>Death % Change</th>
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<tr>
<td>New York</td>
<td>2,229,473</td>
<td>48%</td>
<td>374,085</td>
<td>6%</td>
<td>24,079</td>
<td>5%</td>
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<td>New Jersey</td>
<td>837,420</td>
<td>58%</td>
<td>162,068</td>
<td>8%</td>
<td>11,880</td>
<td>11%</td>
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<td>Illinois</td>
<td>959,175</td>
<td>49%</td>
<td>123,830</td>
<td>23%</td>
<td>5,621</td>
<td>24%</td>
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<td>California</td>
<td>2,131,294</td>
<td>54%</td>
<td>117,687</td>
<td>40%</td>
<td>4,361</td>
<td>27%</td>
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<td>Massachusetts</td>
<td>617,761</td>
<td>26%</td>
<td>101,592</td>
<td>14%</td>
<td>7,152</td>
<td>18%</td>
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<td>Pennsylvania</td>
<td>475,391</td>
<td>36%</td>
<td>74,022</td>
<td>16%</td>
<td>5,741</td>
<td>24%</td>
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<td>Texas</td>
<td>1,006,768</td>
<td>31%</td>
<td>68,271</td>
<td>33%</td>
<td>1,734</td>
<td>22%</td>
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<tr>
<td>Florida</td>
<td>1,082,104</td>
<td>40%</td>
<td>58,764</td>
<td>24%</td>
<td>2,650</td>
<td>22%</td>
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<tr>
<td>Michigan</td>
<td>593,549</td>
<td>36%</td>
<td>58,035</td>
<td>9%</td>
<td>5,570</td>
<td>10%</td>
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<tr>
<td>Maryland</td>
<td>327,625</td>
<td>52%</td>
<td>54,982</td>
<td>30%</td>
<td>2,641</td>
<td>24%</td>
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Through patient activity observed for diagnosis, testing, exposure or symptoms of COVID-19 infection, PRA is tracking about 2.5M patients during the time period February 4, 2020 to May 28, 2020. Data is updated weekly to report on latest updates for trends observed.

Patients could be reported in multiple status categories based on claims captured and mapped to status.

Amongst the 396,022 COVID-19 diagnosed patients
- 63% of the diagnosed patients are 50 years or older.
- 35% of the diagnosed patients had at least one record of inpatient care for their diagnosis.

Caveats: Due to expected lag in claim submissions to payers, trends for metrics such as patient volumes by all demographic and other attributes are expected to change on a rolling 8 to 10 weeks period.

*Patients could be covered by more than one payer type

PRA is using guidance provided by CDC and CMS, to classify patients as diagnosed, tested, exposed, symptomatic and exposed or tested.

Data Period: Feb 4th, 2020 to May 28th, 2020

PRA US patient longitudinally linked medical and hospital claims data, raw patient volumes
Diagnosis Distributions of COVID-19 Diagnosed Patients

Data Period: Feb 4th, 2020 to May 28th, 2020

Caveats: Due to expected lag in claim submission to payers, trends for metrics such as patient volumes by all demographic and other attributes are expected to change on a rolling 8 to 10 weeks period.

**Chronic - Up to 1 year before Covid-19 diagnosis**

- N= 315,086
- General or Specified Pain: 48%
- Hypertension: 42%
- Hyperlipidemia: 29%
- Diabetes Mellitus - Type II: 25%
- Anemia: 17%
- GERD: 16%
- Obesity: 15%
- Vitamin Deficiency: 14%
- Depression: 13%
- Anxiety: 13%
- Osteoarthritis: 12%
- Chronic Kidney Disease (CKD): 10%
- CAD: 10%
- Hypothyroidism: 10%
- Hypercholesterolemia: 8%
- COPD: 8%
- Asthma: 7%
- Heart Failure: 7%
- Sleep Apnea: 7%
- Nicotine Dependence: 7%

**Acute - Up to 1 month before/after first Covid-19 diagnosis date**

- N=353,130
- Other Viral Pneumonia: 28%
- Cough: 27%
- Fever: 22%
- Shortness of Breath: 21%
- Acute Respiratory Failure with Hypoxia: 19%
- Pneumonia, Unspecified Organism: 16%
- Acute Kidney Failure: 12%
- Hypoxemia: 9%
- Acute Upper Respiratory Infection: 8%
- Sepsis, Unspecified Organism: 7%
- Chest Pain: 6%
- Viral Infection: 6%
- Other Specified Sepsis: 6%
- Hypo-Osmolality and Hyponatremia: 6%
- Diarrhea: 5%
- Weakness: 5%
- Dyspnea: 5%

**Acute - Same day as first Covid-19 diagnosis date**

- N= 311,351
- Other Viral Pneumonia: 26%
- Cough: 16%
- Acute Respiratory Failure with Hypoxia: 16%
- Fever: 13%
- Shortness of Breath: 13%
- Acute Kidney Failure: 9%
- Pneumonia, Unspecified Organism: 9%
- Hypoxemia: 6%
- Other Specified Sepsis: 5%

**Diagnosis**

- Hypertension, hyperlipidemia and T2DM were the most common chronic comorbidities observed in patients diagnosed with COVID-19 infections.
- Acute infection symptoms and diagnoses captured within a month prior to or on date of first COVID-19 infection included acute respiratory failure with hypoxia, cough, shortness of breath, acute kidney failure, hypoxemia, and sepsis.
Amongst the most common locations of care for COVID-19 diagnosed patients, patients seen in inpatient settings are relatively older, while patients seen through telehealth are relatively younger.

Caveats: Patients may be diagnosed at multiple places of service. Each patient is counted once for each place of service where they have been diagnosed.
COVID-19 Diagnosed Patients with Inpatient Hospital Care

PRA evaluated a total of 157,637 patients diagnosed with COVID-19 infection. Of these patients, 68,242 (43%) patients had inpatient hospital care.

95% of the 68,242 patients received first COVID-19 infection diagnosis in the hospital.

N= 64,692 Patients

Demographics
- Mean age of the patients was 64, median 65 years
- 82% of the hospitalized patients were 50 years or older
- 55% of these patients were male

Duration of Hospitalizations
- The length of stay was about 2 days shorter for patients under the age of 40
- Female patients had a slightly shorter length of stay than male patients

Route to Hospitalization
- 40% of hospitalized patients were admitted from a place of service other than the ER. This could be referrals from physician's office, outpatient department, telehealth, urgent care facilities, and skilled nursing facilities.
- 95% of patients received their initial diagnosis during hospitalization, indicating a very severe presentation of symptoms, hospitalization, then diagnosis.
- 5% of patients received their initial diagnosis outside of an inpatient hospital setting; these patients were slightly younger (median age of 61) and had a shorter duration of inpatient hospital stay (median of 5 days). These patients could have presented with less severe symptoms initially.

Caveats: Due to expected lag in claim submission to payers, trends for metrics such as patient volumes by all demographic and other attributes are expected to change on a rolling 8 to 10 weeks period.

Overall Length of Stay by Patient Volume

<table>
<thead>
<tr>
<th>Length of Stay</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>31+ days</td>
<td>1%</td>
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<tr>
<td>29-30 days</td>
<td>0%</td>
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<tr>
<td>27-28 days</td>
<td>1%</td>
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<tr>
<td>25-26 days</td>
<td>1%</td>
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<tr>
<td>23-24 days</td>
<td>1%</td>
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<tr>
<td>21-22 days</td>
<td>1%</td>
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<tr>
<td>19-20 days</td>
<td>2%</td>
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<td>17-18 days</td>
<td>2%</td>
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<td>15-16 days</td>
<td>3%</td>
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<tr>
<td>13-14 days</td>
<td>4%</td>
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<td>11-12 days</td>
<td>6%</td>
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<tr>
<td>9-10 days</td>
<td>9%</td>
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<tr>
<td>7-8 days</td>
<td>12%</td>
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<tr>
<td>5-6 days</td>
<td>17%</td>
</tr>
<tr>
<td>3-4 days</td>
<td>21%</td>
</tr>
<tr>
<td>1-2 days</td>
<td>18%</td>
</tr>
</tbody>
</table>

N= 64,692 Patients

- Mean Stay: 7 to 8 days
- Median Stay: 6 days
- 23% of patients had an inpatient hospital stay longer than 10 days

Mean Length of Stay

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Mean Length of Stay</th>
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<tbody>
<tr>
<td>0-29</td>
<td>6</td>
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<tr>
<td>30-39</td>
<td>6</td>
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<tr>
<td>40-49</td>
<td>7</td>
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<tr>
<td>50-59</td>
<td>8</td>
</tr>
<tr>
<td>60-69</td>
<td>8</td>
</tr>
<tr>
<td>70-79</td>
<td>7</td>
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<tr>
<td>80+</td>
<td>6</td>
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Median Length of Stay

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Median Length of Stay</th>
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<tbody>
<tr>
<td>0-29</td>
<td>5</td>
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<tr>
<td>30-39</td>
<td>4</td>
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<tr>
<td>40-49</td>
<td>4</td>
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<td>50-59</td>
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<td>60-69</td>
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<tr>
<td>70-79</td>
<td>6</td>
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<tr>
<td>80+</td>
<td>6</td>
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Patient Age Distribution

Mean Age - 64 | Median Age - 65

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>0-29</td>
<td>3%</td>
</tr>
<tr>
<td>30-39</td>
<td>6%</td>
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<tr>
<td>40-49</td>
<td>10%</td>
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<tr>
<td>50-59</td>
<td>18%</td>
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<tr>
<td>60-69</td>
<td>24%</td>
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<tr>
<td>70-79</td>
<td>21%</td>
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<tr>
<td>80+</td>
<td>18%</td>
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Oncology Deep Dive: Cancer Screenings, Diagnoses, & Treatments
COVID-19 Impacts to Cancer Screenings, Diagnoses, & Treatments

- Research into select cancer populations was conducted to evaluate high-level shifts in treatment patterns throughout the patient journey.

- Six types of cancers are profiled in this analysis:
  - Pancreatic
  - Multiple Myeloma (MM)
  - Chronic Myeloid Leukemia (CML)
  - Breast
  - Prostate
  - Non-Small Cell Lung Cancer (NSCLC)

- In the following slides, Symphony has reviewed shifts in behaviors around cancer screenings, new patient diagnoses, care delivery, and treatment.

- Symphony will continue our coverage of Oncology in future reports by profiling other types of cancers and highlighting other data trends that may require a longer reporting timeframe to analyze.

Sources:

Many patients with cancer struggled to receive treatment for their cancers due to hospitals cancelling or delaying surgeries and other procedures, including chemotherapy and radiation therapy.

People with breast cancer that have metastasized (spread) to the lungs may get worse if they develop COVID-19.

Preventative cervical, colon, and breast cancer screenings nationwide suffered an 86-94% drop since early this year.

The number of skin cancers diagnosed is down 80%.

Some cancer treatments – including chemotherapy, targeted therapies, immunotherapy, and radiation – can weaken the immune system and possibly cause lung problems which can be exacerbated by COVID-19.
Breast and Prostate screening tests were most impacted patients weighed the risks of COVID-19 exposure vs. performing routine health maintenance.

Oncology specific screenings yielded significant declines during the peak COVID-19 pandemic period with signs of bounce back beginning in late April.

Index = Current Week vs. 12 Week Rolling Average (from the same time period in 2019)
Screening Rate= # of tests ordered and includes both surgical and lab procedures

Oncology Markets of Interest:
- **Hematological Malignancies (Blood Cancers):** Chronic Myeloid Leukemia (CML), Multiple Myeloma (MM)
- **Solid Tumors:** Breast, Non-Small Cell Lung Cancer (NSCLC), Pancreatic, Prostate

HEMATOLOGIC (HEM) category represents blood panels to test for CML, and Multiple Myeloma due to shared screening diagnostic procedures.
While diagnostic screenings have started to return to normal, newly diagnosed patient counts are still declining and may take longer to rebound due to lags in labs reporting results or delays in scheduling physician follow-ups.

- Pancreatic cancer has declined the least, likely due to the severity of the disease.
- Breast cancer has displayed the largest decline in relation to the observation of overall decreases in screening rates.

**Distribution of Newly Diagnosed Patients by Tumor Type**

**Oncology Markets of Interest:**
- **Hematological Malignancies (Blood Cancers):** Chronic Myeloid Leukemia (CML), Multiple Myeloma (MM)
- **Solid Tumors:** Breast, Non-Small Cell Lung Cancer (NSCLC), Pancreatic, Prostate

*Index = Current Week vs. 12 Week Rolling Average (from the same time period in 2019)*
Oncology patient visits with HCPs during the pandemic varied greatly by tumor type. The severity of disease and likelihood of acute episodes appears to be a major contributing factor.

### Distribution of Office Visits by Tumor Type

Index from 2019

*Office visits excludes telemedicine and home health visits*

- **CML**, Breast & Prostate Cancers experienced the greatest decline in office visits.
- Cancers prone to acute episodes, such as Pancreatic Cancer, declined the least.

### % Change in Types of Visits from 2019

(6 Weeks: March-April 2020)

- ER: -36%
- Inpatient: -30%
- Office: -40%
- Outpatient: -48%
- Telemedicine: 4293%

Outpatient visits had the greatest decline, which is a leading location of infused therapies.

### Oncology Markets of Interest:

- **Hematological Malignancies (Blood Cancers):** Chronic Myeloid Leukemia (CML), Multiple Myeloma (MM)
- **Solid Tumors:** Breast, Non-Small Cell Lung Cancer (NSCLC), Pancreatic, Prostate

Index = Current Week vs. 12 Week Rolling Average (from the same time period in 2019)

Week 19 = May 15th, 2020
Despite lower screening and diagnosis rates during the COVID pandemic, the rate of patients initiating therapy for infused products has remained largely unchanged from 2019 levels.

- CML is the only cancer type to show a significant decline in patients initiating therapy with infused products, decreasing 50% from 2019 levels during by the end of March.
- Since then, the rate of new patient starts on CML infused products has return to near 2019 levels.
- All other tumor types showed little or no decrease the new to brand patient starts and contrary to expectations have actually increased significantly since mid-April.

Oncology Markets of Interest:
- Hematological Malignancies (Blood Cancers): Chronic Myeloid Leukemia (CML), Multiple Myeloma (MM)
- Solid Tumors: Breast, Non-Small Cell Lung Cancer (NSCLC), Pancreatic, Prostate

New to Brand Patients: Based on 12-month lookback index vs. 12 week average from the same time in 2019
Due to typical Rx trend seasonality for Solid Tumor cancers, new to brand patient volume was trending upward pre-COVID-19. However, there are observable declines in volume coinciding with the National State of Emergency in Mid-March.

Oncology Markets of Interest:
- **Hematological Malignancies (Blood Cancers):** Chronic Myeloid Leukemia (CML), Multiple Myeloma (MM)
- **Solid Tumors:** Breast, Non-Small Cell Lung Cancer (NSCLC), Pancreatic, Prostate

Index = Current Week vs. 12 Week Rolling Average (from the same time period in 2019)
New to Brand Patients: Based on 12-month lookback

Solid Tumor Types: Distribution of New to Brand Rx Patients Summed to Market

- **NSCLC**
- **Pancreatic**
- **Breast**
- **Prostate**
Regardless of tumor type, hematological malignancies and solid tumors both share similar upward pre-COVID trends followed by a downturn in reported activity.

**Index** = Current Week vs. 12 Week Rolling Average (from the same time period in 2019) New to Brand Patients: Based on 12-month lookback

**Oncology Markets of Interest:**
- **Hematological Malignancies (Blood Cancers):** Chronic Myeloid Leukemia (CML), Multiple Myeloma (MM)
- **Solid Tumors:** Breast, Non-Small Cell Lung Cancer (NSCLC), Pancreatic, Prostate
General Market Pulse

Telemedicine & Care Delivery Trends

High Value Market + Select Elective Therapy Monitoring

National / Channel / Pay Type Summaries
Overall telemedicine trends started to show evidence of decline while patient office visits continued to display marked improvement the week leading up to Memorial Day weekend.
• The majority of telemedicine visits for a given diagnosis have started to level off or decline from the COVID-19 peak period.
• Telemedicine use for patients with diseases of the circulatory system has declined 30% from the high in the week of May 1.

### Telemmedicine Visits: Diagnosis

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*Symphony Health*

A PRA Health Sciences Company

*Index = Current Week vs. 12 Week Rolling Average (from the same time period in 2019)*
Office Visits: Diagnosis

- Office visits have been gradually recovering from their lowest point during the week of March 27th.
- Recovery for respiratory diseases is significantly slower compared to other disease types.

Index = Current Week vs. 12 Week Rolling Average (from the same time period in 2019)
Telemedicine Visits: Specialty

• Telemedicine use by provider specialty continues decline for the majority of specialties.
• Among cardiologists, the use of telemedicine is down significantly from peak usage, but still higher than 2019 trends.

Index = Current Week vs. 12 Week Rolling Average (from the same time period in 2019)
• Office visits continue to increase from their low point in the week of March 27th for all specialties.

• Oncology and Psychiatric specialties have resumed normal reporting thresholds compared to the prior year.

• Pediatric office visits remain down by 40% compared to 2019 levels.
• Use of telemedicine for Medicaid patients initially increased by a factor of 25 and has remained more than 20 times higher than 2019 levels.

• Telemedicine use by Commercial and Cash patients initially increased dramatically following the state of emergency announcement on March 14th, but has since declined substantially.

• Use of telemedicine by Medicare patients increased 13 fold and has maintained that level.

• Office visits for Cash patients is down over 60% from 2019 levels and shows little evidence of recovery. This may be due, at least in part, to increased unemployment.

Index = Current Week vs. 12 Week Rolling Average (from the same time period in 2019)
ANTIVIRALS: New prescription trends continued to gradually increase following significant declines in mid-March. Patient stockpiling and skyrocketing unemployment may be key contributors to the lower instances of new script activity.

- Overall antiviral activity continued to report -8% below last year’s thresholds as of week ending 5/22/2020.

- New prescriptions closed week ending 5/22/2020 at -15% below prior year volumes, a significant improvement over the -41% low during week ending April 3rd.
CARDIOLOGY: The decline in new cardiology prescriptions is not as drastic as observed in other key markets. By week ending 5/22/2020, new prescription activity is only 1% shy of prior year thresholds.

- New prescription activity peaked with week ending 3/20/2020 following the federal government’s declaration of a state of emergency the week of March 14th.
- New prescription activity declined below regular reporting thresholds in successive weeks but are swiftly recovering.

Cardiology prescription trends are more in-line with 2019 thresholds the week prior to Memorial Day weekend.
IMMUNOLOGY: The COVID-19 pandemic primarily impacted new prescription trends for immunology compared to overall activity. While NRx volumes are recovering, new prescription uptick is still -11% below prior year thresholds.

• Immunology prescriptions continue to report 4% above the previous year’s reporting thresholds as of week ending 5/22/2020.
ONCOLOGY: Total oncology prescriptions are within 2% of 2019 volumes as of week ending 5/22/2020. New prescription activity presented more significant impacts, most likely a consequence of patients weighing the risks of performing routine health maintenance during the COVID-19 pandemic.

As states continue to re-open, new prescription activity displays a corresponding uptick with recent weeks.
**RESPIRATORY THERAPY**: Unlike other key markets, new prescription activity for respiratory therapies are not showing signs of recovery. Since Albuterol Sulfate HFA in particular is a frequently used treatment for COVID-19 patients, the decline in new scripts may be related to patient stockpiles or supply shortages.

- Total respiratory therapy prescriptions continue to trend -6% below 2019 thresholds as of week ending 5/22/2020.
COVID-19 INSIGHTS

Market Summary: Average Days Supply

- The average days supply for Antivirals increased approximately around the same time states went into lockdown.
- Average days supply for Immunology, Oncology, and Cardiology continue to exhibit minimal change with week ending 5/22/2020.
Elective Therapies Continue to Report Below Prior Year Thresholds

- New prescription uptake in elective markets continues to trend below prior year thresholds.
- Total prescription activity is also down, but not to the extent of new activity (Analgesics is the exception).
Despite being down -11% compared to last year, new prescription trends maintain a positive trajectory with week ending 5/22/2020 as states continue to re-open.
While states move forward with re-opening, Assistance Program usage continues to report 19% above prior year thresholds while “cash” scripts remain -14% below 2019 volumes.

- **PAID** = Approved prescriptions taken home by the patient
- **REJECTED** = Prescription claims rejected by the payer
- **ABANDONED** = Prescription claims not taken home by the patient
Retail TRx increased to ~64M (+1% from week ending 5/15/2020) but continues to report -7% below 2019 volumes. Mail Order activity is within -3% of normal reporting thresholds as of week ending 5/22/2020.