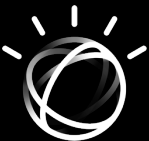




# IBM MarketScan Early View COVID-19 Report

Published on: January 18, 2021    Early View with data through: October 30, 2020

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## About the source data for this report

The IBM® MarketScan® Research Databases are one of the largest and longest-running proprietary US claims databases currently available for conducting healthcare research.

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### **IBM MarketScan Research Databases**

The IBM MarketScan Research Databases include patient-level data on over 273M unique enrollees that reflect the real-world continuum and cost of health care. They include three core claims databases, a hospital drug database, and several linked databases that combine claims data with other health-related data (e.g., lab results, productivity) at the enrollee-level. The three claims databases are the IBM MarketScan Commercial Database, the IBM MarketScan Medicare Supplemental Database, and the IBM MarketScan Medicaid Database.

### **IBM MarketScan Commercial and Medicare Supplemental Databases**

This report includes data from the MarketScan Commercial and Medicare Databases, which consist of statistically deidentified real-world claims data spanning all therapeutic areas for commercially insured individuals in the United States. The Databases provide detailed cost, use, and outcomes data for healthcare services performed in both inpatient and outpatient settings. The medical claims are linked to outpatient prescription drug claims and person-level enrollment data using unique enrollee identifiers. The MarketScan Commercial Database includes members of the under-65 working population and their dependents. The MarketScan Medicare Supplemental Database includes retirees with Medicare supplemental insurance paid by employers.

>2,600 peer-reviewed journal articles cite IBM MarketScan data

## About the source data for this report

The data in this report come from IBM MarketScan Early View, a subscription option that provides our most current Commercial and Medicare claims data.

### IBM MarketScan Early View

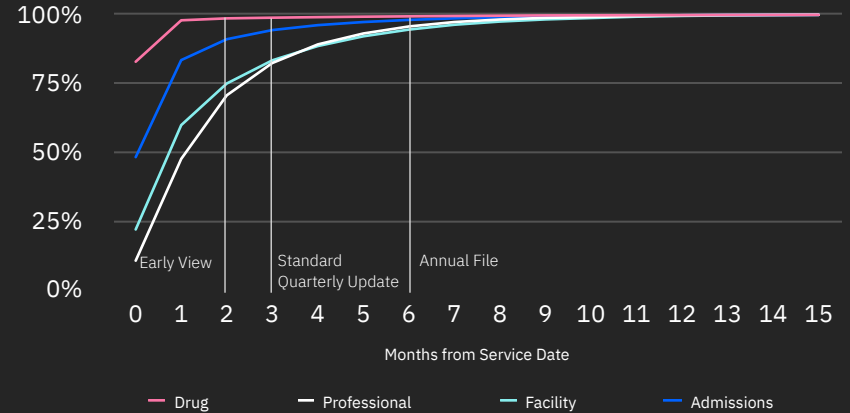
- Claims are in the database as early as 2 months after the service date.
- Healthcare services are processed and paid at different rates.
- Drug claims are paid quickly, reaching 99% completion after one month, while other claim types take longer.
- The most recent month of claims in any dataset will be less complete compared to earlier months contained in the dataset.

### Why Early View is valuable for COVID-19 research

Patients who need a treatment for COVID-19 are looking to life sciences companies to help them find a solution quickly. IBM MarketScan Early View can help you address your COVID-19 research needs with our most current claims data, which include historical real-world clinical and cost information about enrollees who have been diagnosed with COVID-19.

In addition to the data that we offer, our team of specialists has over 30 years of experience using retrospective and other data and can help you articulate and execute on your COVID-19 research objectives.

Completion Rates for Claims Data Types over Time



### Update Cadence for IBM MarketScan Commercial and Medicare Databases

#### Claims data through

#### Early View Available

August	October
September	November
October	December
November	January

# IBM MarketScan Early View COVID-19 Report

## COVID-19-related healthcare utilization

Published on: **January 18, 2021** Early View with data through: **October 2020**

This table will be updated on a monthly basis, providing the earliest possible view of fully adjudicated, paid claims as they become available in the IBM MarketScan Commercial and Medicare Databases. IBM MarketScan Early View contains data with service dates 2 months prior to data availability.

	September Early View (data through July 2020)		October Early View (data through August 2020)		November Early View (data through September 2020)		December Early View (data through October 2020)	
	N	%	N	%	N	%	N	%
<b>Total enrollees in MarketScan CCAE/MDCR</b>	<b>23,991,073</b>	<b>-</b>	<b>24,476,958</b>	<b>-</b>	<b>25,080,859</b>	<b>-</b>	<b>25,266,142</b>	<b>-</b>
<b>Total patients with COVID-19 (U07.1 Dx)</b>	<b>121,594</b>	<b>0.51%</b>	<b>207,242</b>	<b>0.85%</b>	<b>274,050</b>	<b>1.09%</b>	<b>325,792</b>	<b>1.29%</b>
<b>Confirmed exposure to COVID-19 (Z20.828)</b>	<b>864,509</b>	<b>3.6%</b>	<b>1,465,539</b>	<b>6.0%</b>	<b>1,958,955</b>	<b>7.8%</b>	<b>2,361,497</b>	<b>9.3%</b>
<b>Month of Diagnosis</b>	N	%	N	%	N	%	N	%
January 2020	2	0.0%	2	0.0%	2	0.0%	3	0%
February 2020	3	0.0%	3	0.0%	2	0.0%	5	0%
March 2020	1,289	1.1%	1,337	0.6%	314	0.1%	1,276	0.4%
April 2020	38,757	31.9%	39,805	19.2%	35,564	13.0%	39,454	12.1%
May 2020	31,237	25.7%	33,011	15.9%	32,227	11.8%	33,260	10.2%
June 2020	30,050	24.7%	42,536	20.5%	43,968	16.0%	46,116	14.2%
July 2020	20,256	16.7%	66,930	32.3%	79,187	28.9%	85,767	26.3%
August 2020	-	-	23,618	11.4%	48,547	17.7%	57,185	17.6%
September 2020	-	-	-	-	21,787	8.0%	41,256	12.7%
October 2020	-	-	-	-	-	-	21,470	6.6%

# IBM MarketScan Early View COVID-19 Report

## COVID-19 Summary Statistics

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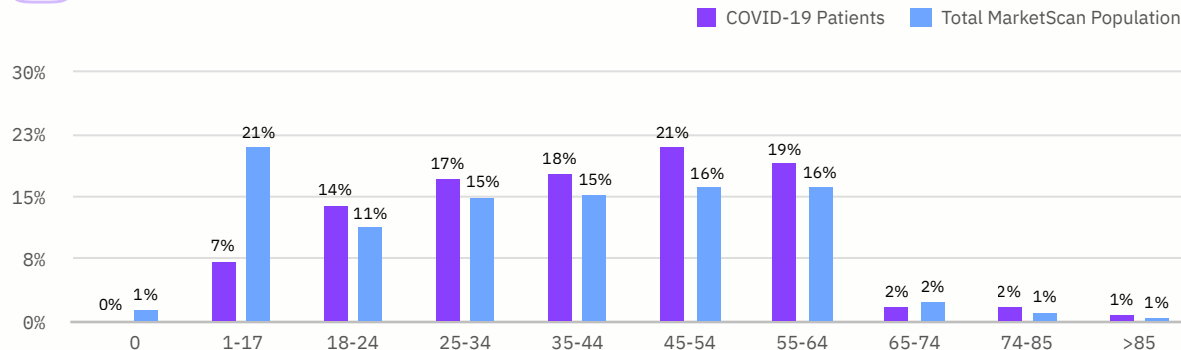
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<b>COVID-19-related ED visits</b>	<b>24,573</b>	<b>20.2%</b>	<b>47,242</b>	<b>22.8%</b>	<b>61,740</b>	<b>22.5%</b>	<b>71,311</b>	<b>21.9%</b>
<b>COVID-19-related hospitalization</b>	<b>12,324</b>	<b>10.1%</b>	<b>17,661</b>	<b>8.5%</b>	<b>21,758</b>	<b>7.9%</b>	<b>24,592</b>	<b>7.5%</b>
Total days COVID-19-related hospitalization	<b>7.96</b>	<b>8.72</b>	<b>7.75</b>	<b>9.03</b>	<b>7.74</b>	<b>9.49</b>	<b>7.69</b>	<b>9.52</b>
<b>SARS-CoV-2 virus lab test</b>	<b>1,001,373</b>	<b>4.17%</b>	<b>1,769,920</b>	<b>7.23%</b>	<b>2,397,912</b>	<b>9.56%</b>	<b>2,805,736</b>	<b>11.10%</b>
<b>SARS-CoV-2 virus antibody test</b>	<b>418,951</b>	<b>1.75%</b>	<b>601,780</b>	<b>2.46%</b>	<b>732,096</b>	<b>2.92%</b>	<b>782,274</b>	<b>3.10%</b>

## Demographic characteristics of COVID-19 patients

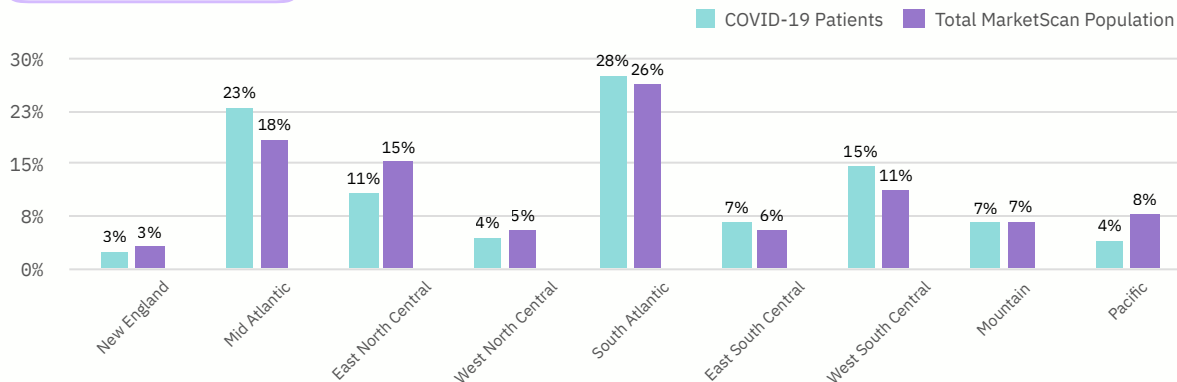
Understanding the demographic characteristics of patients with COVID-19 can help researchers to identify the populations at highest risk and in most need of intervention.



### Age



### United States Census Divisions



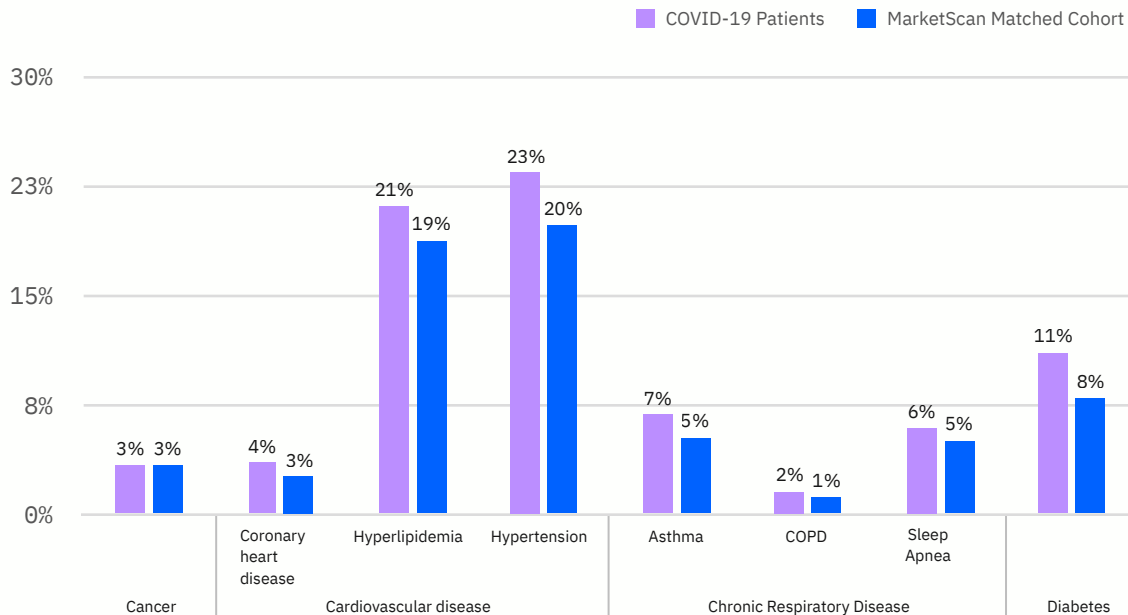
## Clinical characteristics of COVID-19 patients compared to a matched cohort

### INSIGHT

Claims data from the early months of the pandemic show that comorbidities such as asthma, coronary artery disease, and others for patients diagnosed with COVID-19 compared to the general population are key to understanding the clinical course and prediction of clinical outcomes.



Clinical characteristics of COVID-19 patients



COVID-19 cohort: clinical conditions and concomitant medications were measured during any enrollment history in the year prior to earliest COVID diagnosis.

Matched cohort: clinical conditions were measured between June 2019 and and May 2020.

Individuals without a COVID-19 diagnosis were matched to COVID-19 patients 100:1 on age and gender. COVID-related symptoms were measured during the 2 weeks before and anytime following the date of earliest COVID-19 diagnosis.

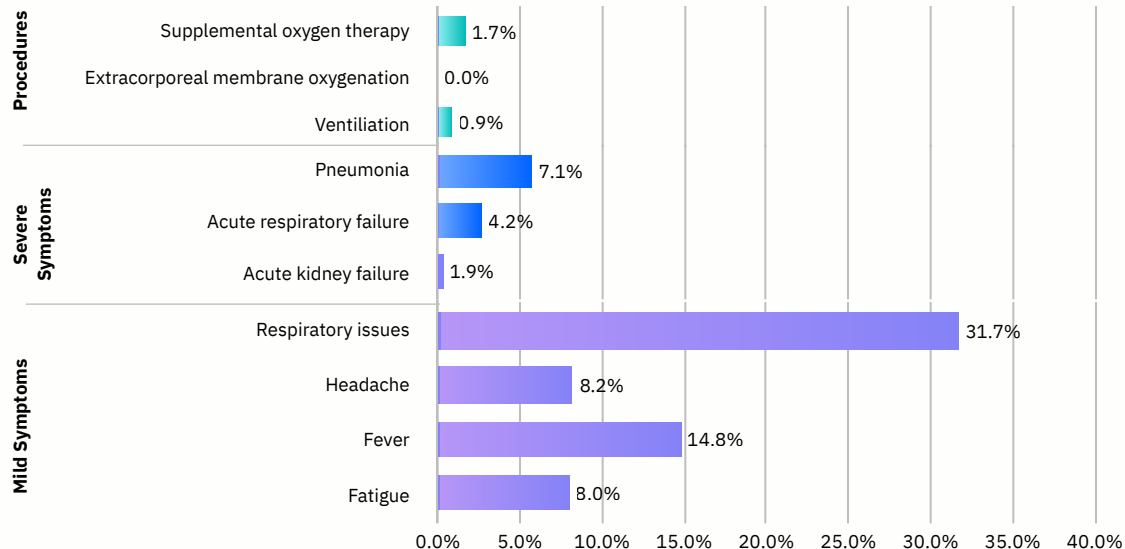
## Symptoms and procedures among COVID-19 patients

### INSIGHT

Understanding the severity and type of presenting symptoms can help inform clinical decision-making during acute illness, understanding the full spectrum of COVID-19 infection, and understanding return to health.



Symptoms and procedures among COVID-19 patients



COVID-related symptoms were measured during the 2 weeks before and anytime following the date of earliest COVID-19 diagnosis.



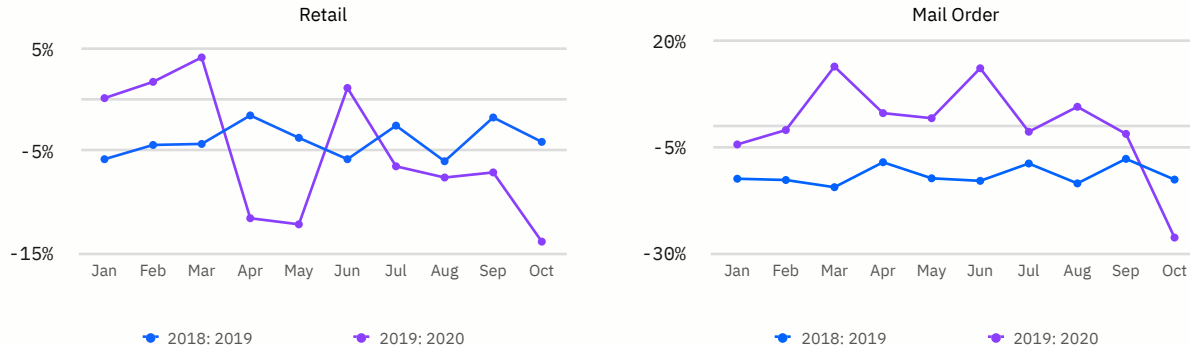
## Drug Utilization

Real-world longitudinal data show month-to-month changes in prescription volumes, categorized by fill method and drug class.

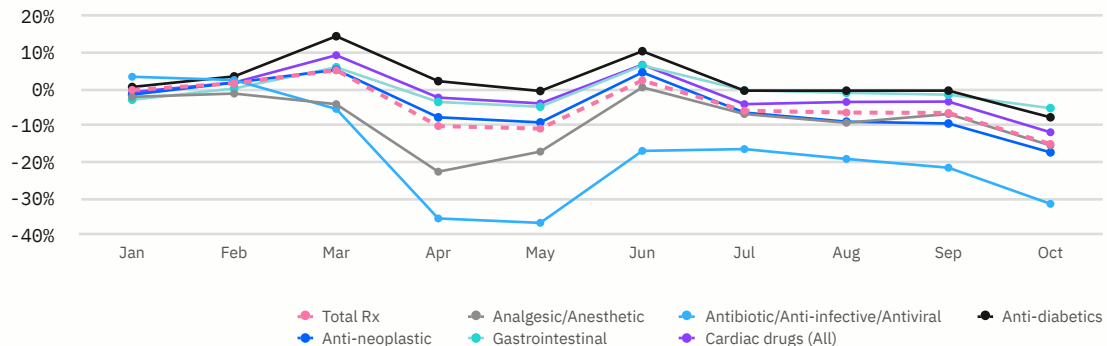
**INSIGHT:** The monthly prescription fill volumes by method demonstrate a shift from retail pharmacy to mail order in the early months of the pandemic. The declines in some medication class volumes (such as cardiac) from March through June may be reflective of a shift in a 30-day supply typically obtained at a retail pharmacy compared to a 60 or 90-day supply by mail order.

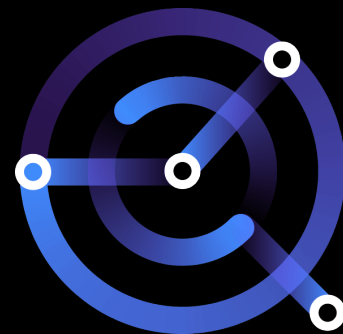


Monthly Change in Prescription Volumes by Fill Method



2019-2020 Change in Prescription Volumes by Rx Class

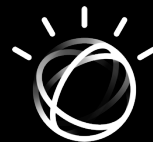


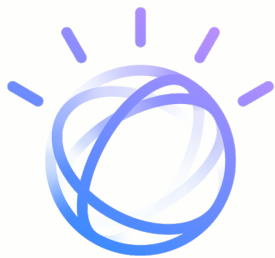


IBM MarketScan Early View

# COVID-19 Report

**Look deeper** | Beyond this no-cost report, IBM Watson Health offers a wide range of databases, data subsets, and research services. For more information, [contact us here.](#)





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