



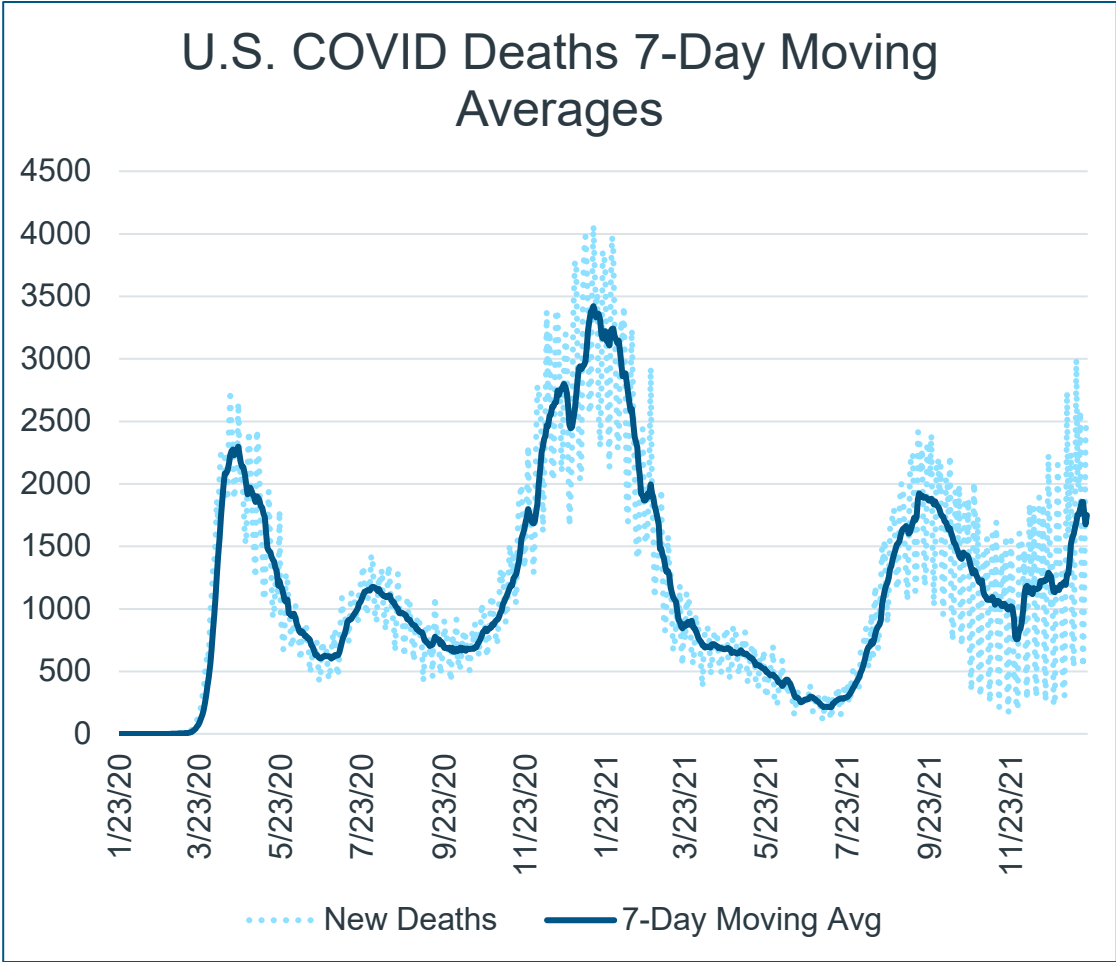
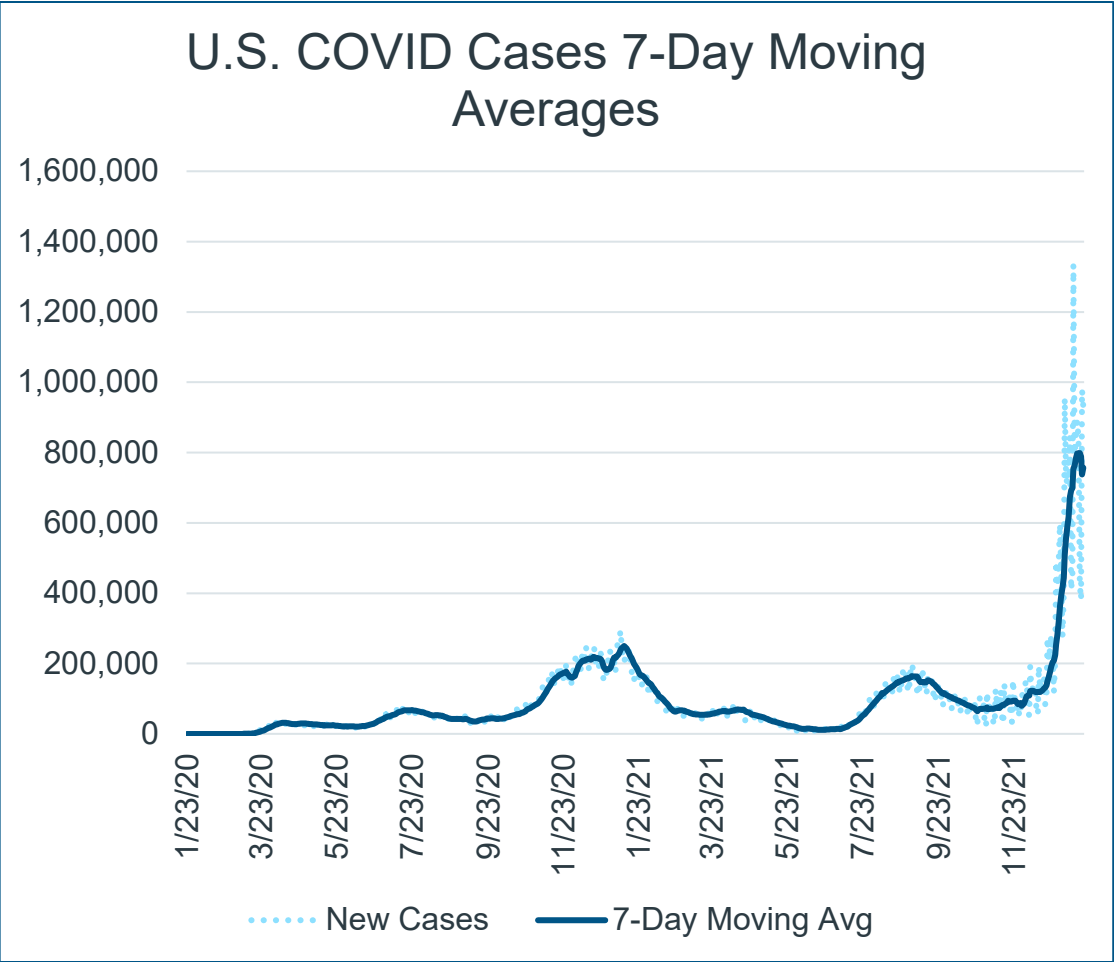
# US Pharmaceutical Trends, Issues and Outlook for NACDS Regional Chain

*Presented by:*  
*Doug Long, VP, Industry Relations*  
*Scott Biggs, Director, Supplier Services*

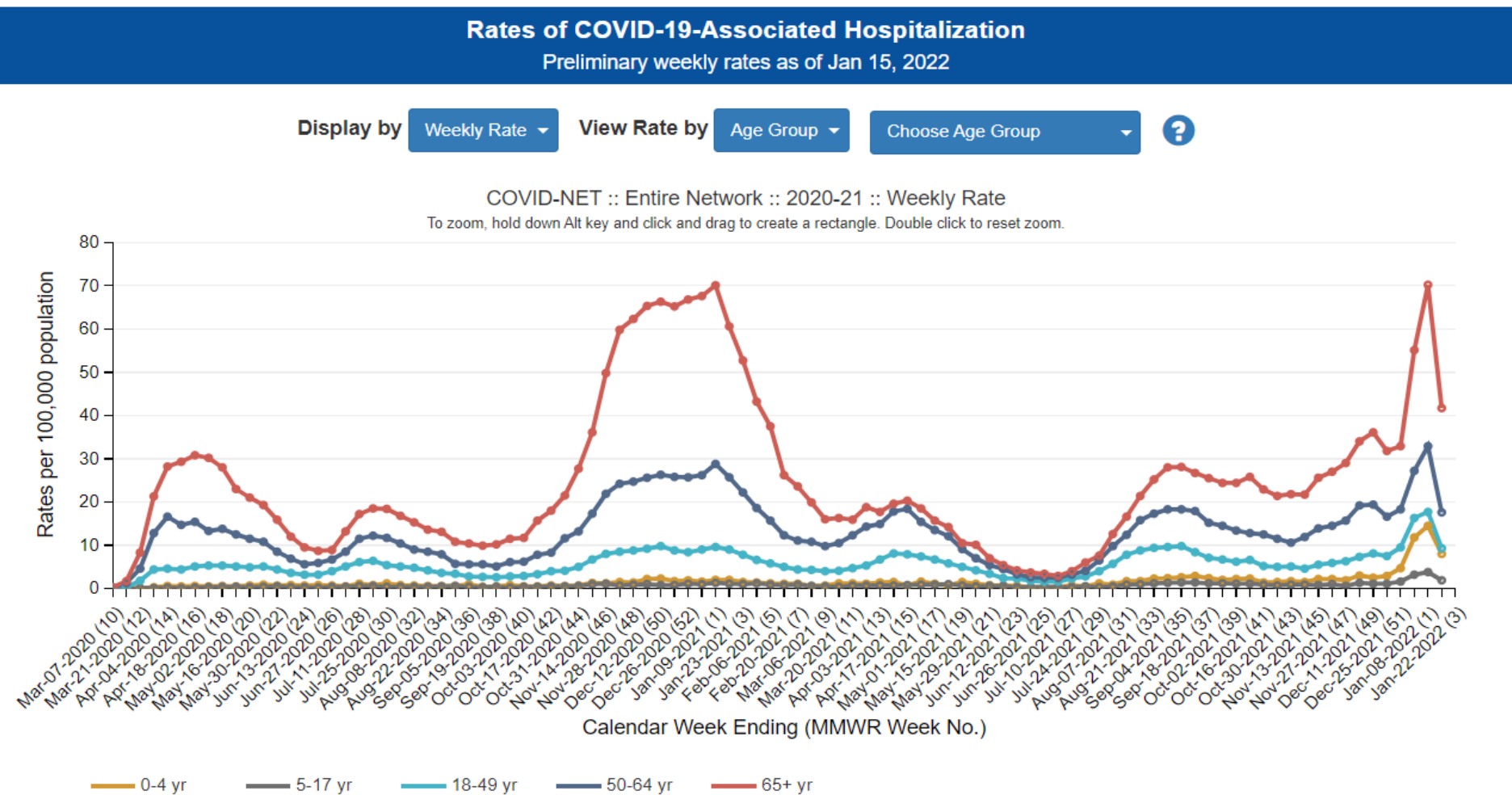
*January 2022*

# COVID Cases, Deaths and Vaccines

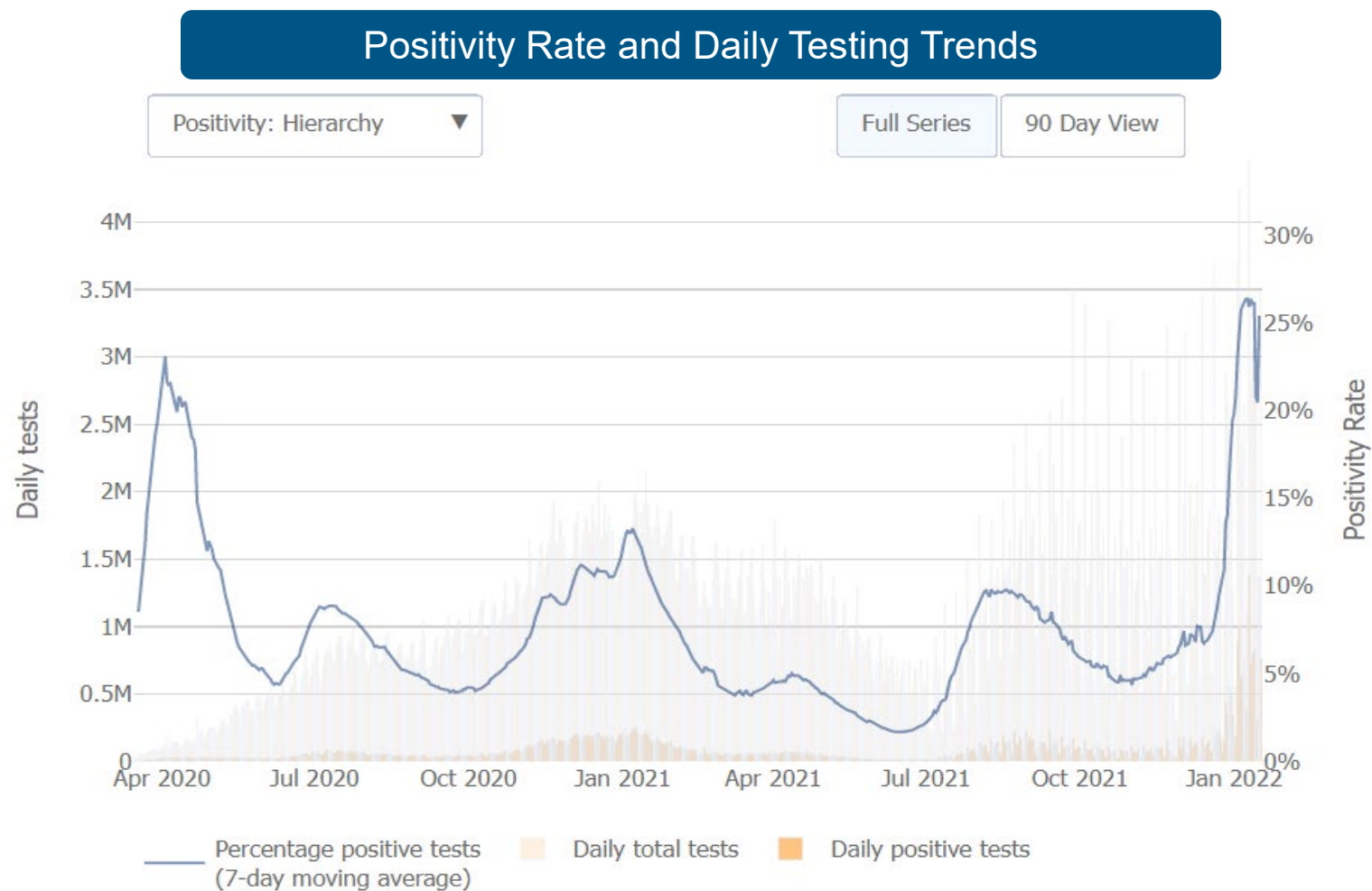
# US COVID-19 Cases and Deaths may have peaked



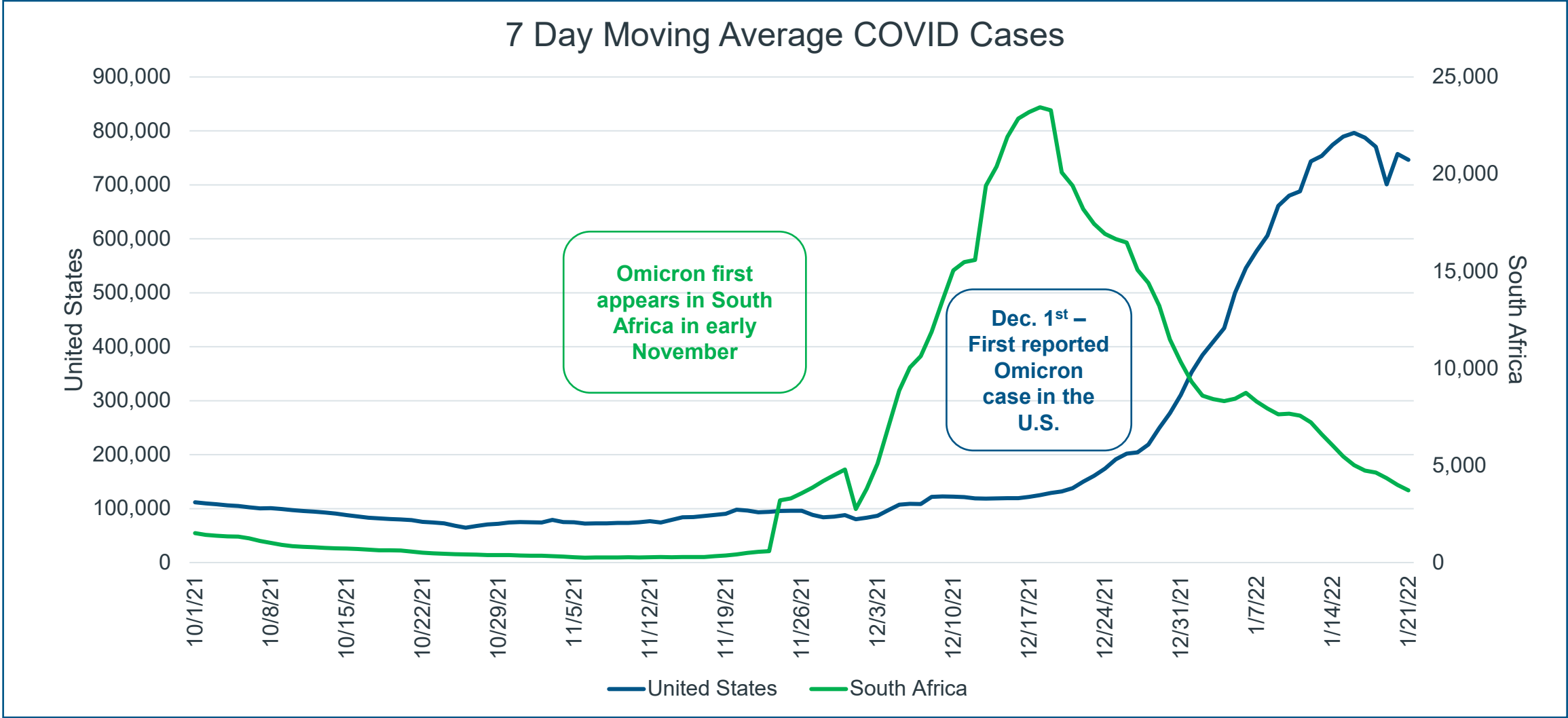
# COVID-19 Hospitalizations may have also peaked



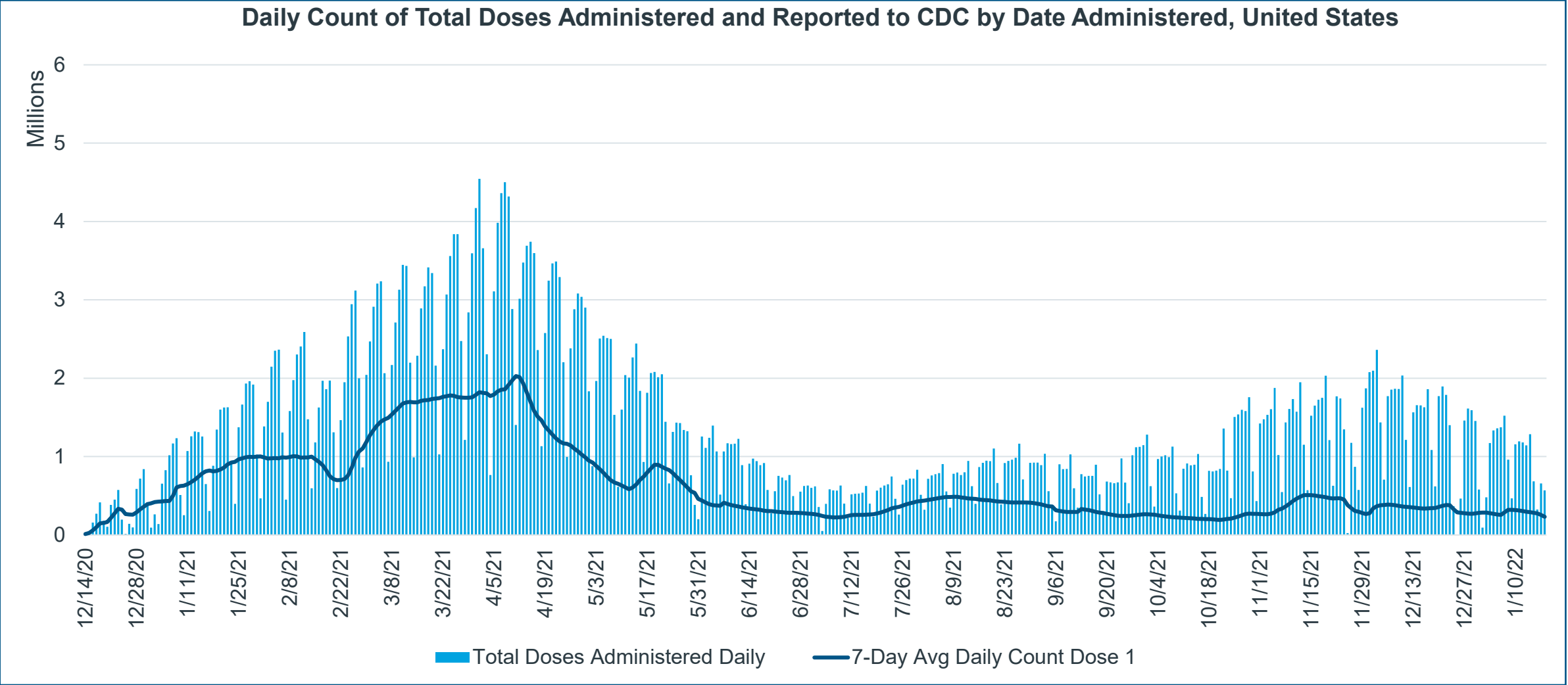
# The Positivity Rate is dropping



# Omicron's duration maybe appears to be shorter based on South Africa's experience

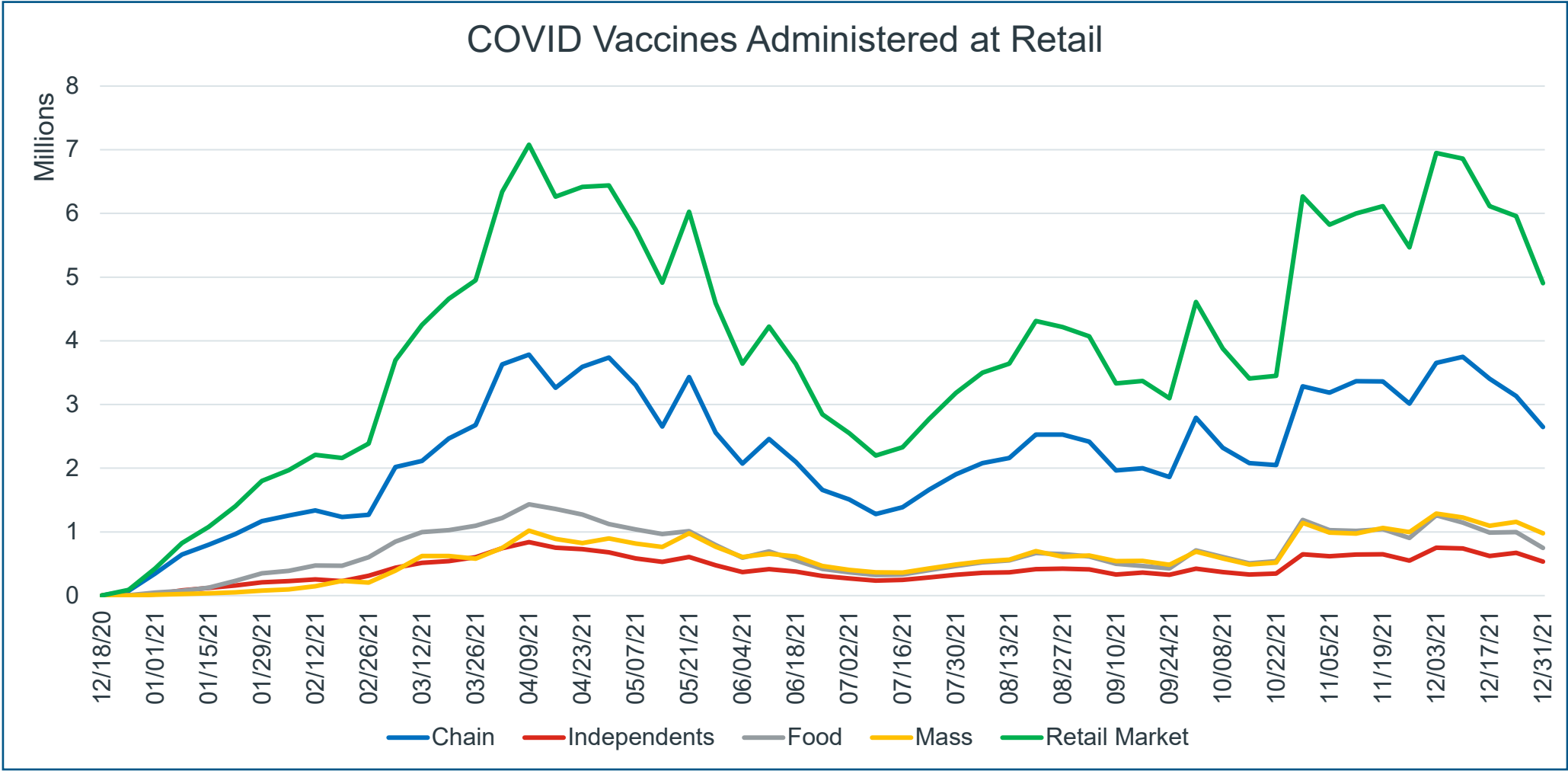


# As of January 18, 2022, the 7-Day Average of Daily Doses administered is approximately ~231,000



Data Source: <https://covid.cdc.gov/covid-data-tracker/#vaccination-trends> 2022

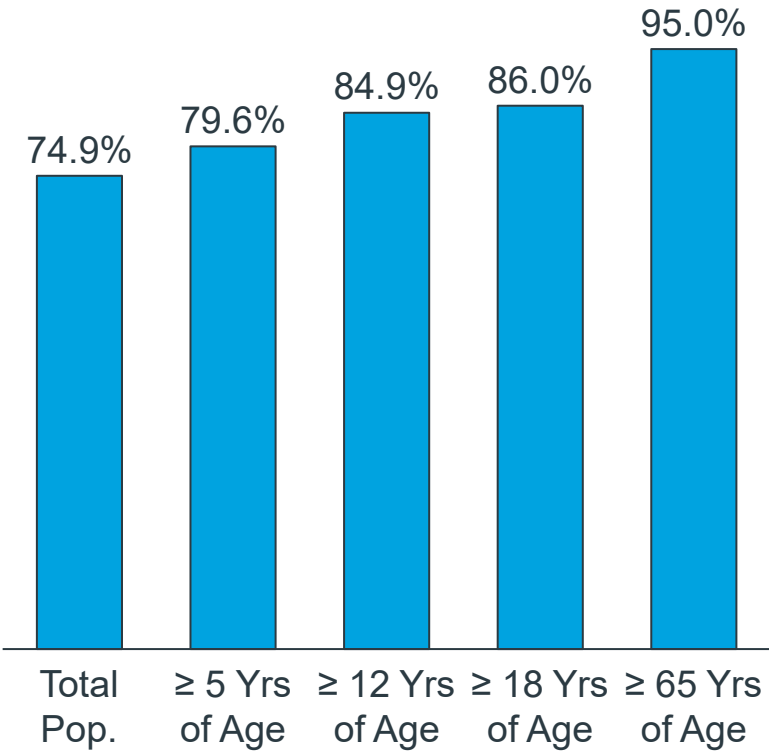
# Retail continues to step up and meet the demands of this pandemic



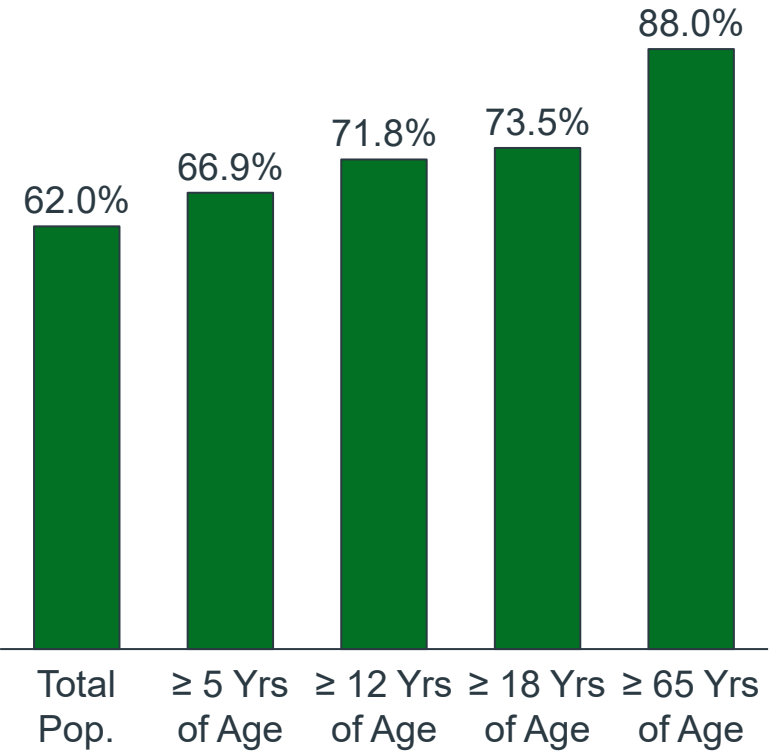


# At least 62% of the total population is fully vaccinated and 38% has received a booster

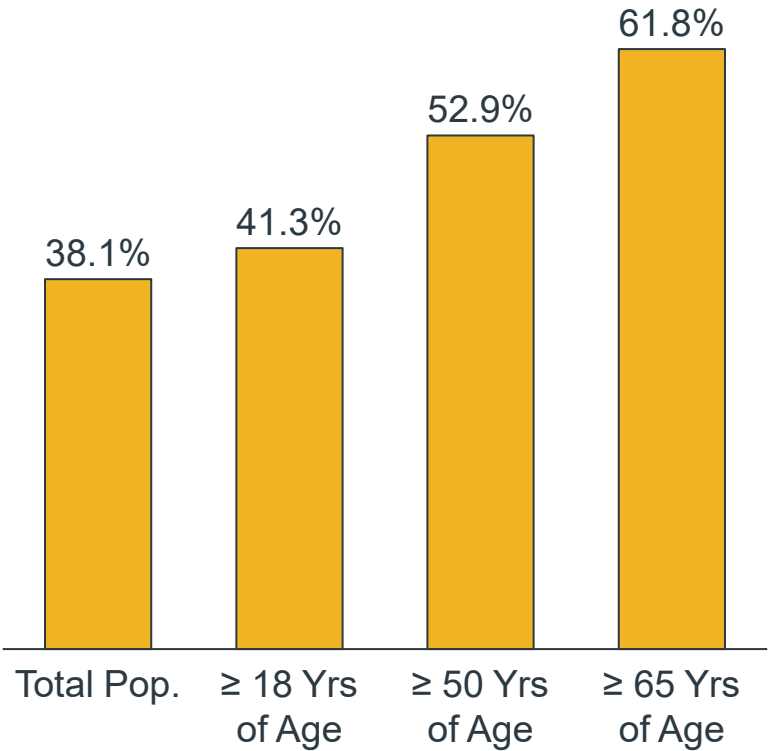
@ Least 1 Dose



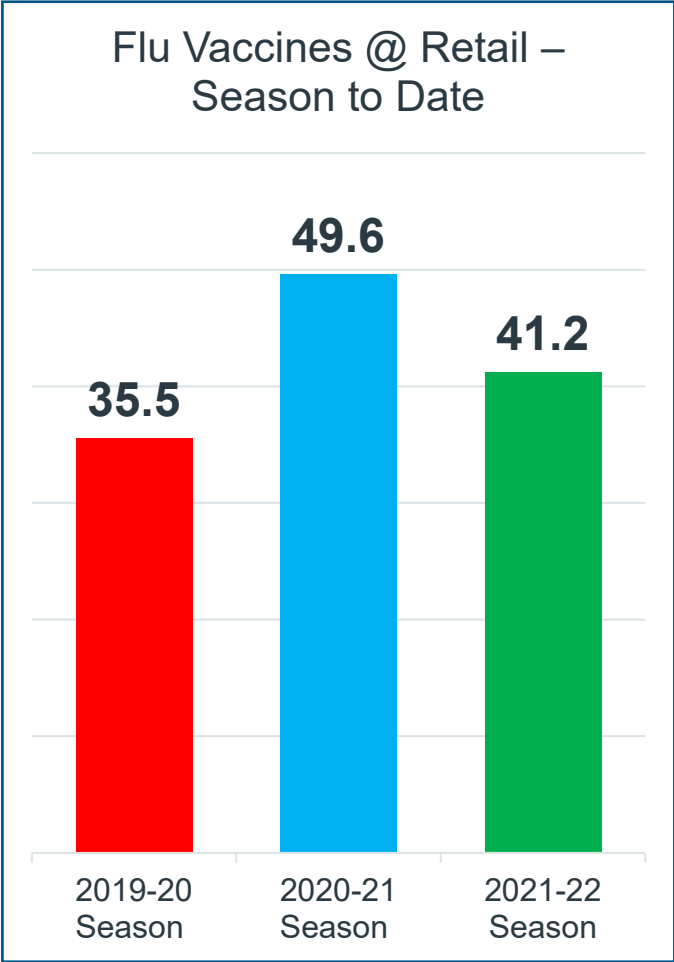
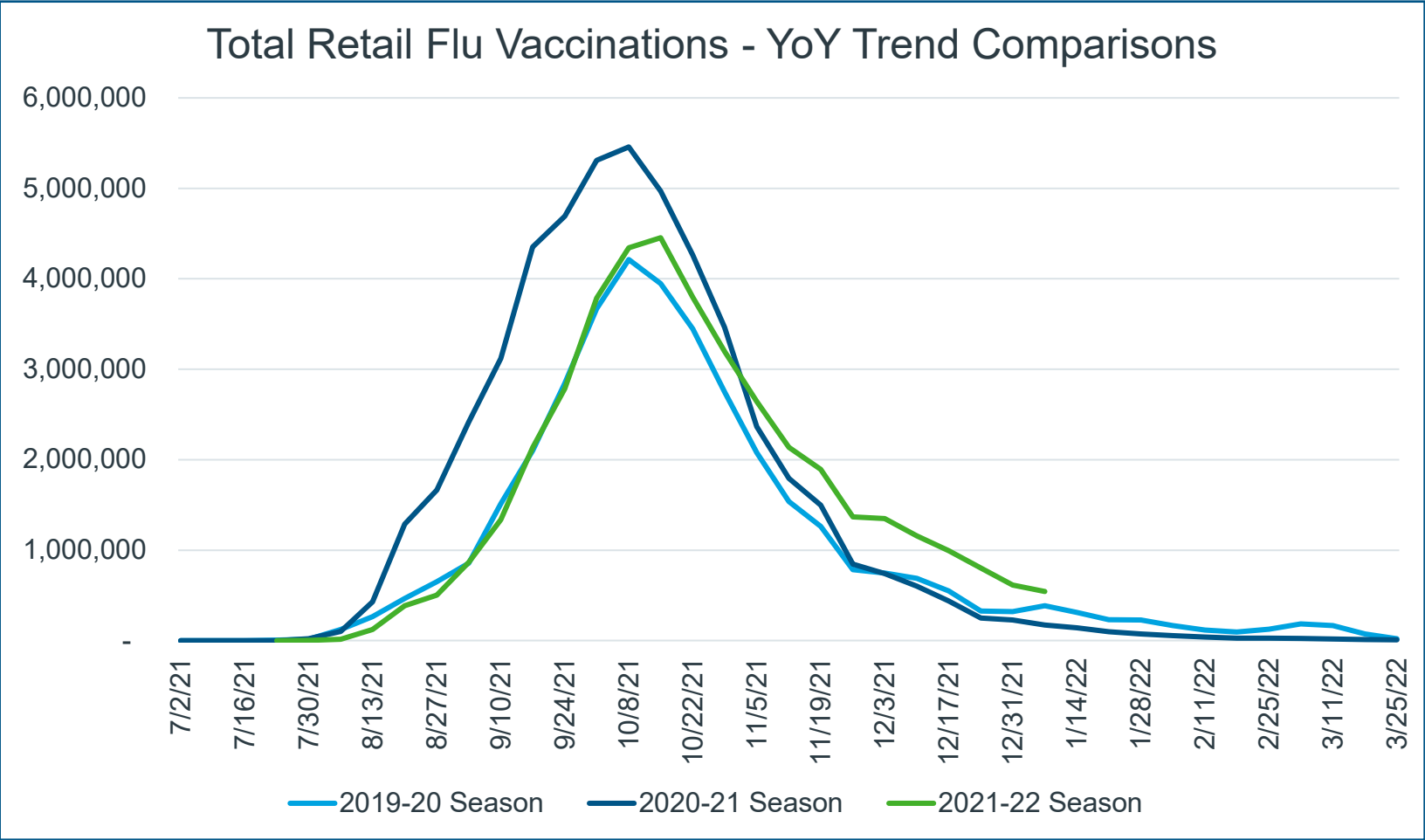
Fully Vaccinated



Booster Doses

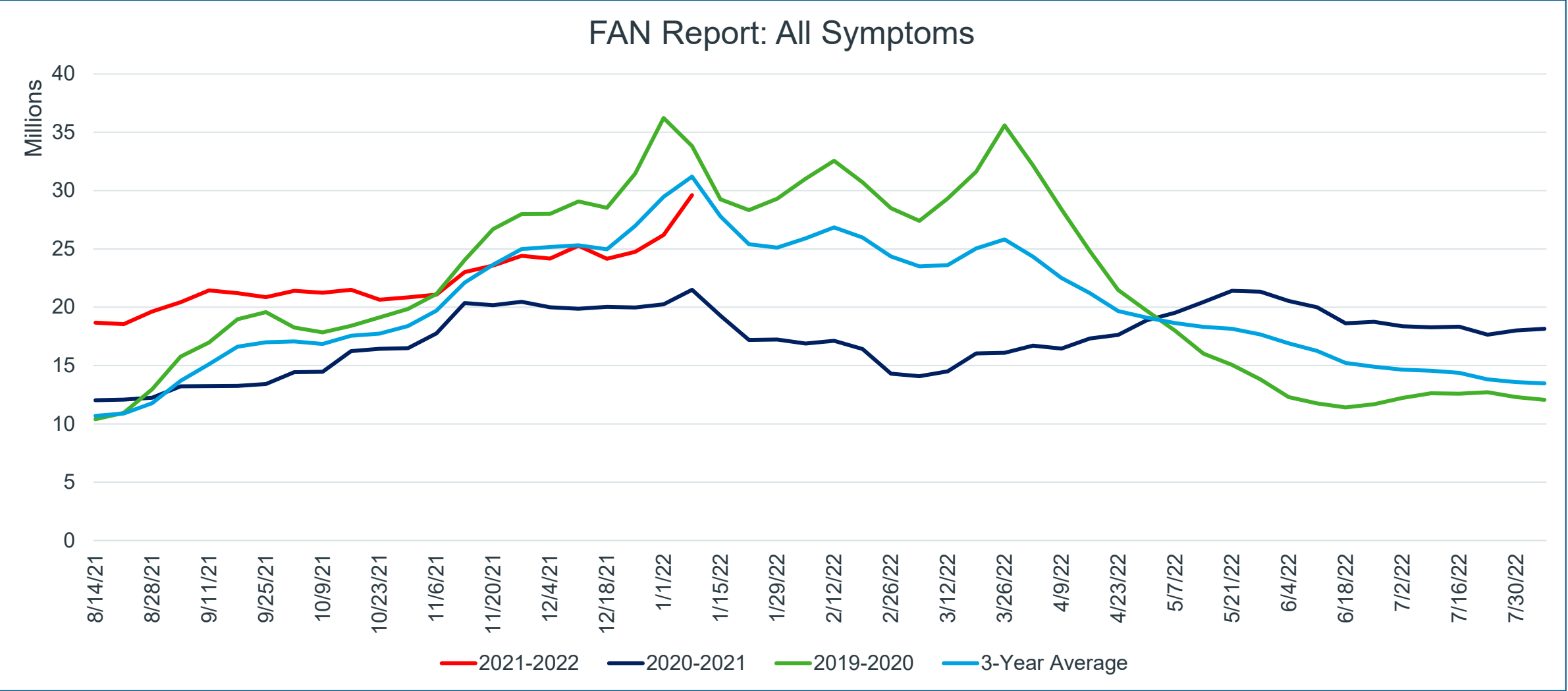


# Season to date flu vaccinations at Retail are behind but current trends are running ahead

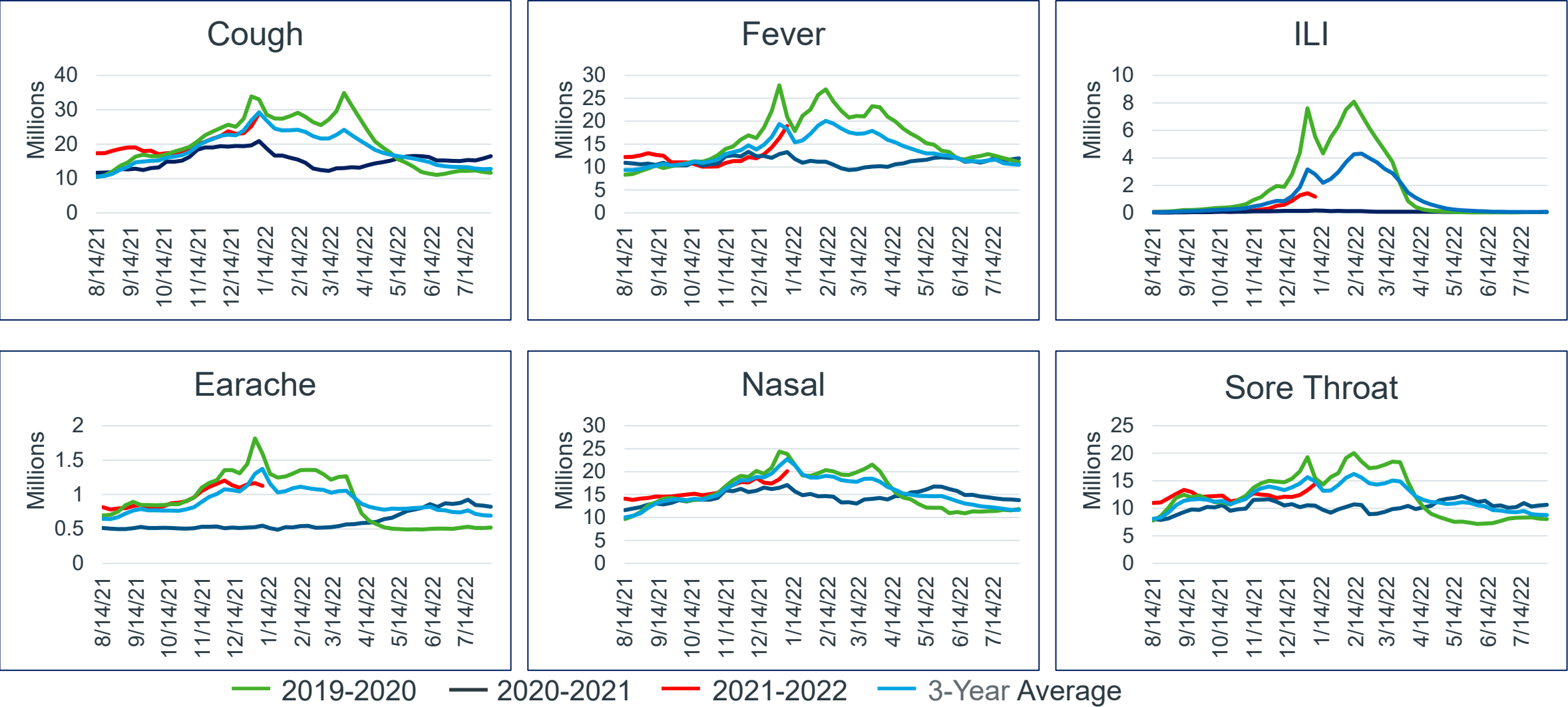


Data Source: IQVIA Xponent®

# The FAN<sup>®</sup> report for all symptoms indicates more cases beginning in May in comparison to the the last two years

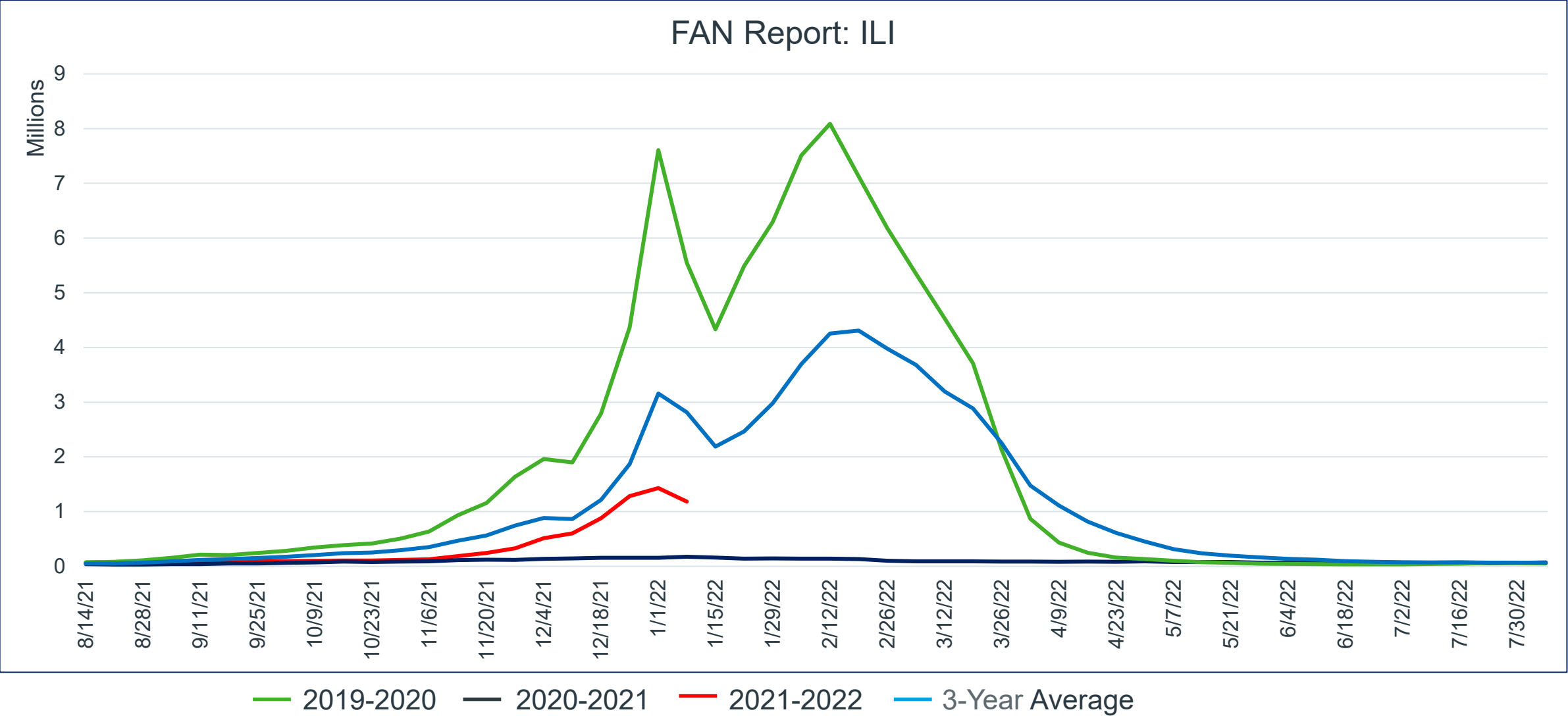


# Cough, Fever, Nasal, and Sore Throat started above norms but now fall below 2019-2020

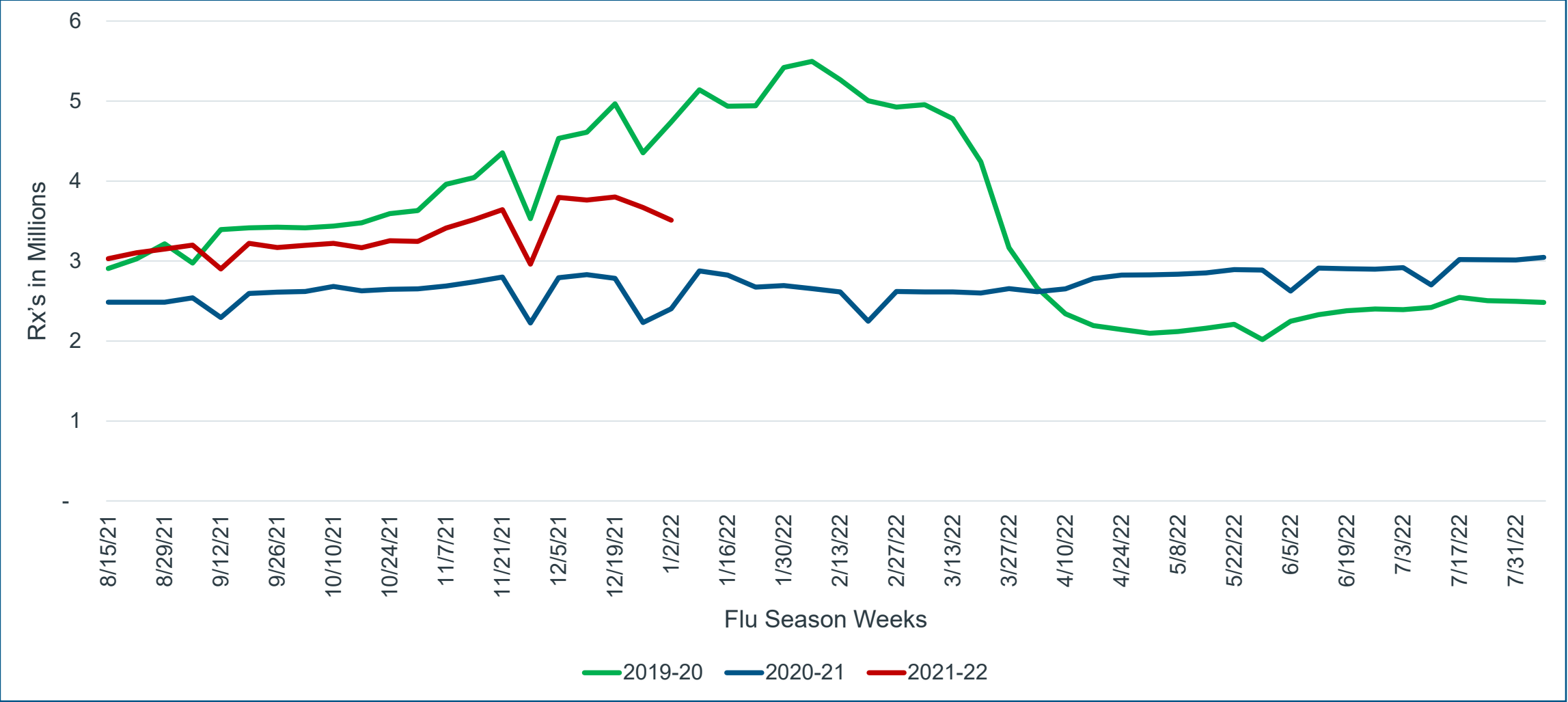


Data collected from [www.fan52.com](http://www.fan52.com), 2022.

# Influenza Like Illnesses run below prior seasons but are up Year over Year

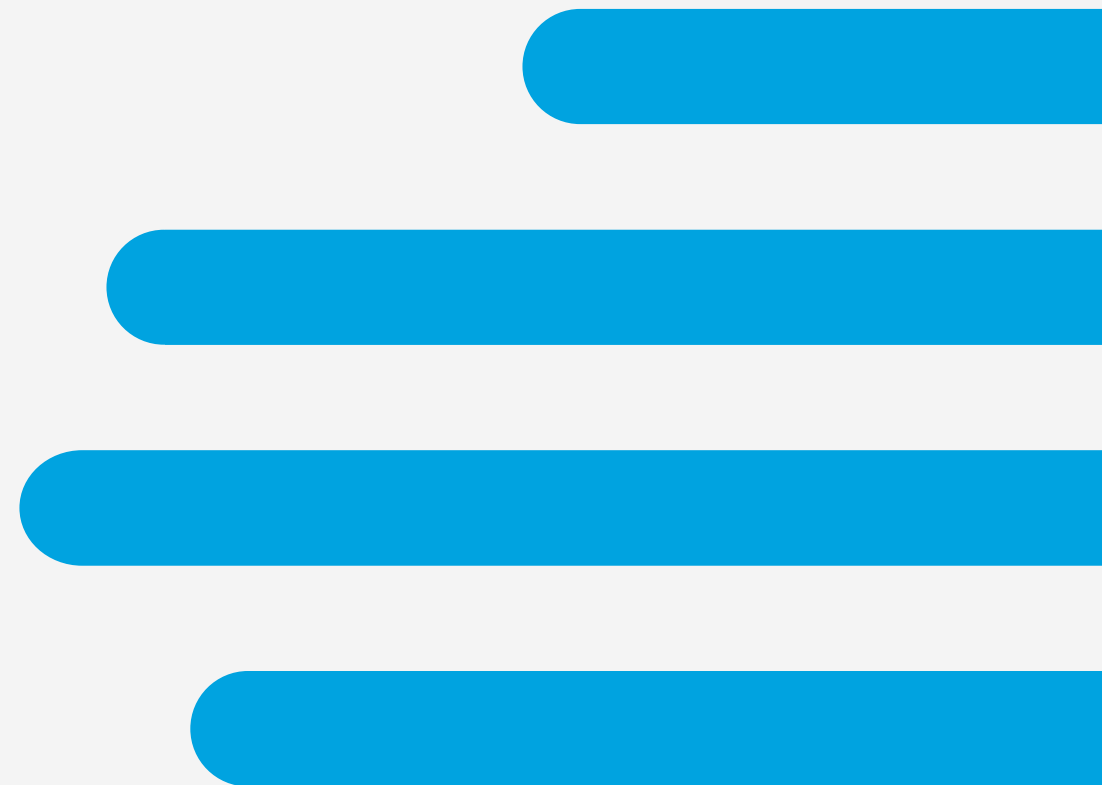


# Current Cough, Cold, and Flu Rx's are running above last season



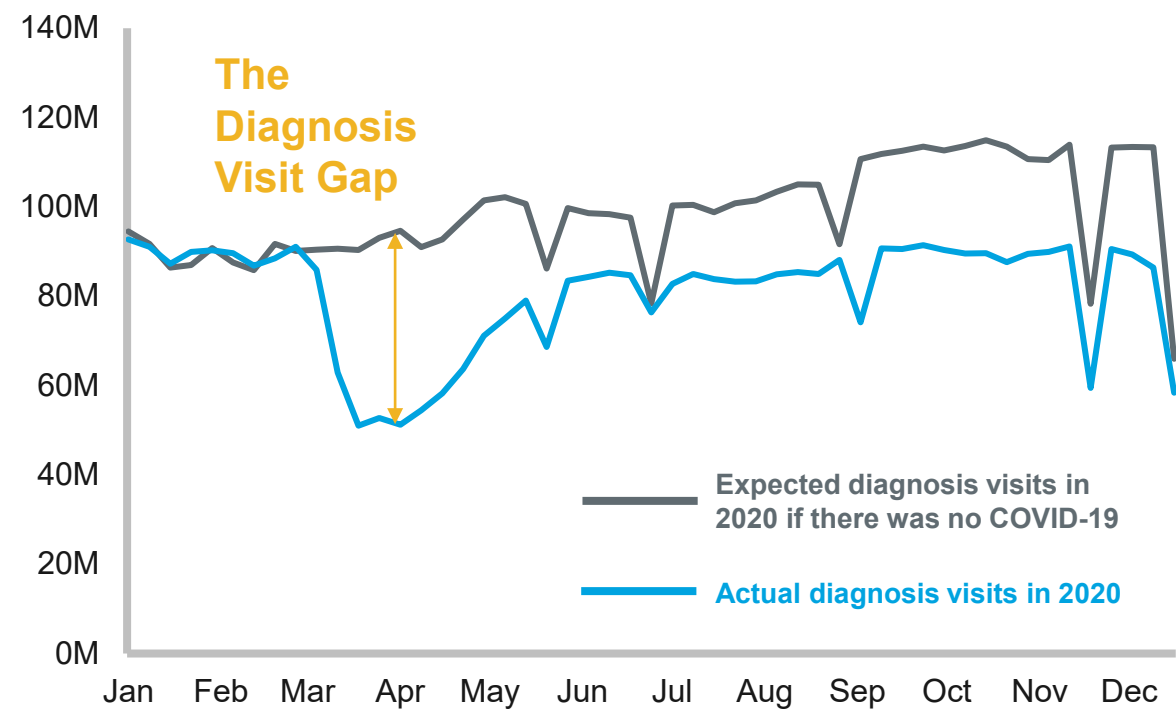
# Market Trends: Utilization

*Medical claims/activity*



# In 2020 there were almost 1 billion diagnosis visits that did not happen

A leading indicator of long-term impact

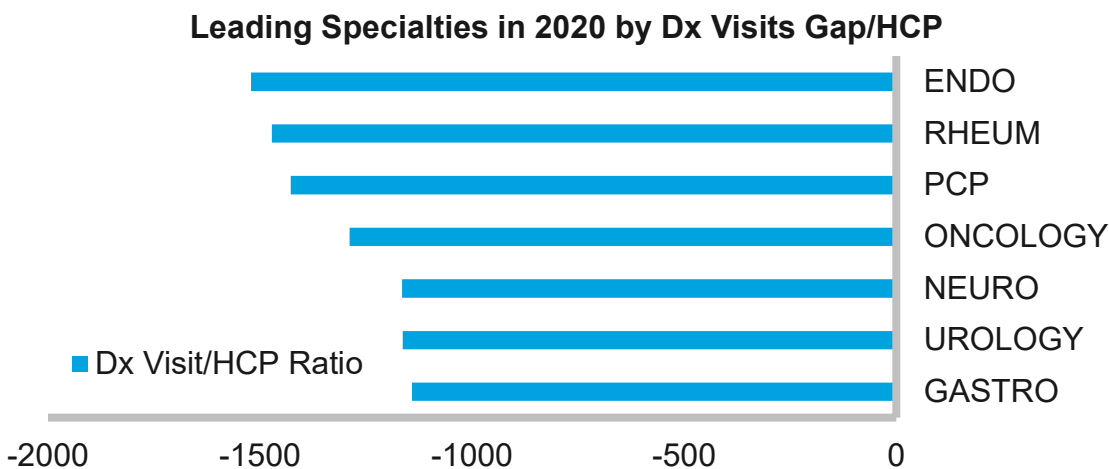


## What is the “diagnosis visit gap”?

*Difference between diagnosis visits<sup>1</sup> expected during a hypothetical non-COVID scenario and the number of diagnosis visits we actually see*

<sup>1</sup>IQVIA: Medical Claims Data Analysis, 2021, IQVIA Analysis

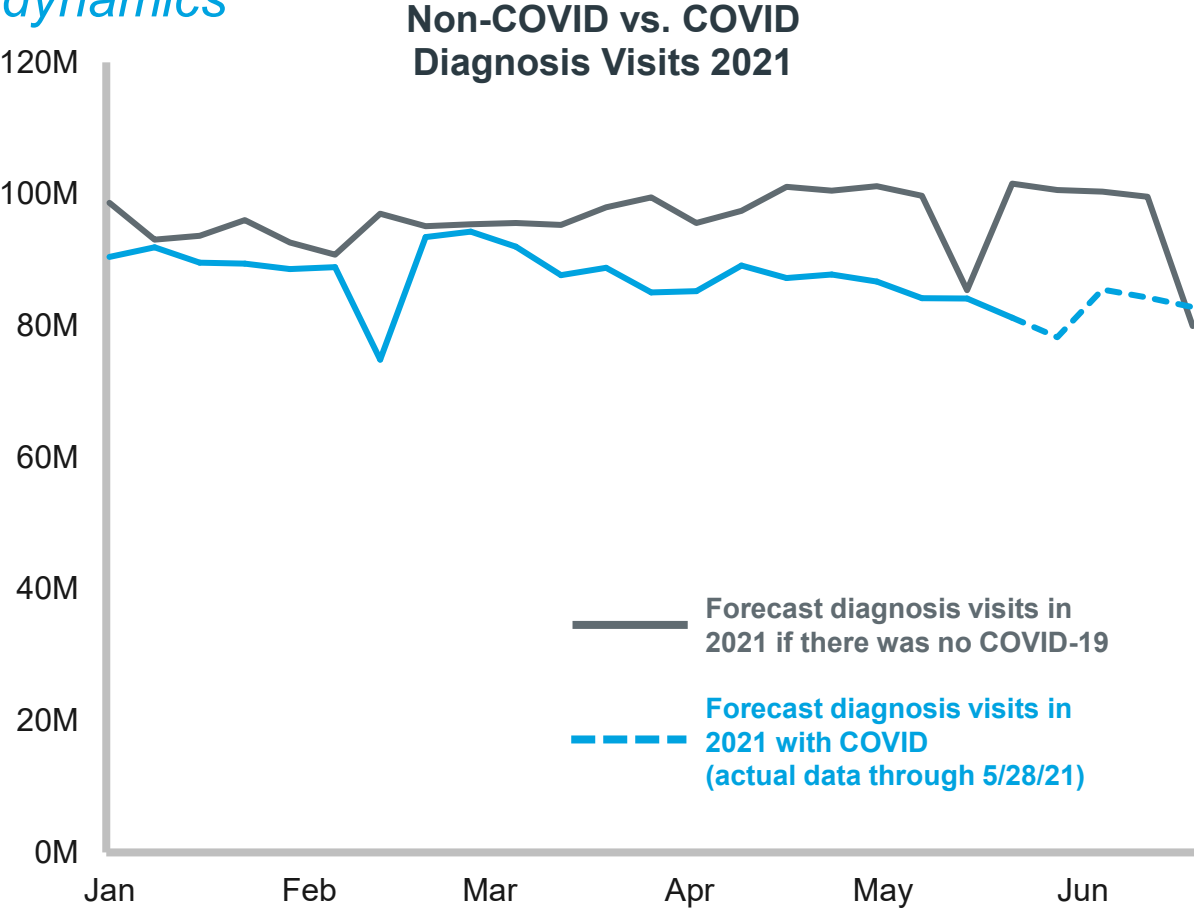
<sup>1</sup>A diagnosis visit is for one single diagnosis per patient, per HCP; a patient can have more than one diagnosis visit assigned to them, with either more than one diagnosis per doctor or more than one doctor per diagnosis





# Post-COVID dynamics continue to have an impact – nearly 300M diagnosis visits have not occurred in the first half of 2021

*Lower-than-expected total diagnosis visit volumes in May have created more separation than previously forecast; vaccine deployment and other triggers will continue to influence these dynamics*



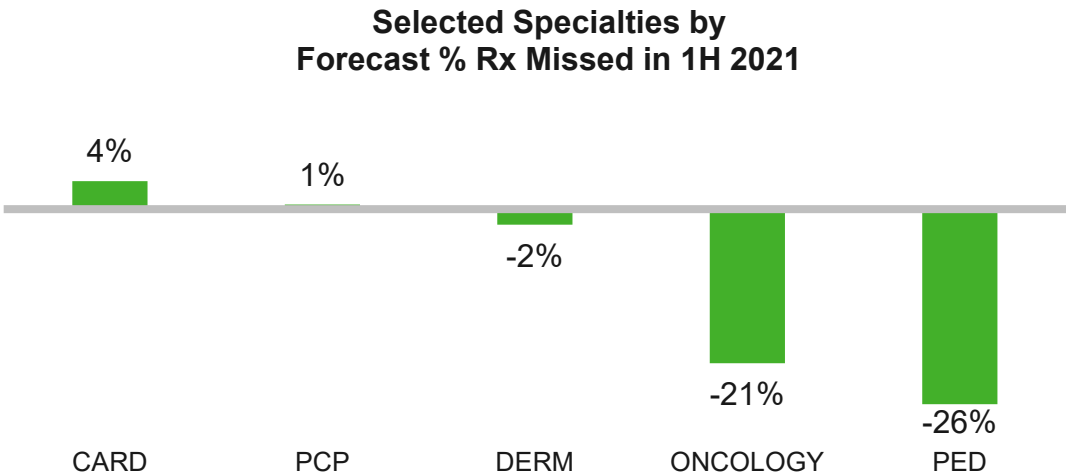
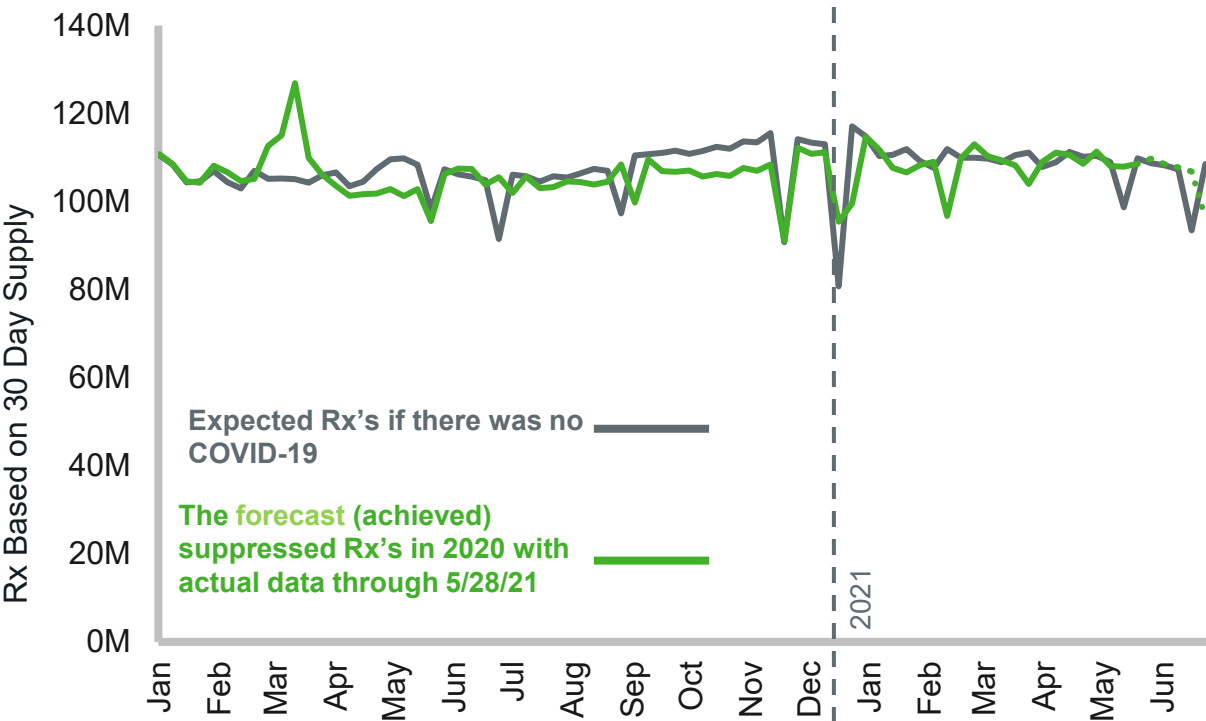
**Total Forecast  
Diagnosis Visit  
Gap in 1H 2021**

**-270.2M**

**% of Expected  
Diagnosis Visits  
in 1H 2021**

**-10.8%**

# Missed diagnosis visits have a direct effect on prescription utilization

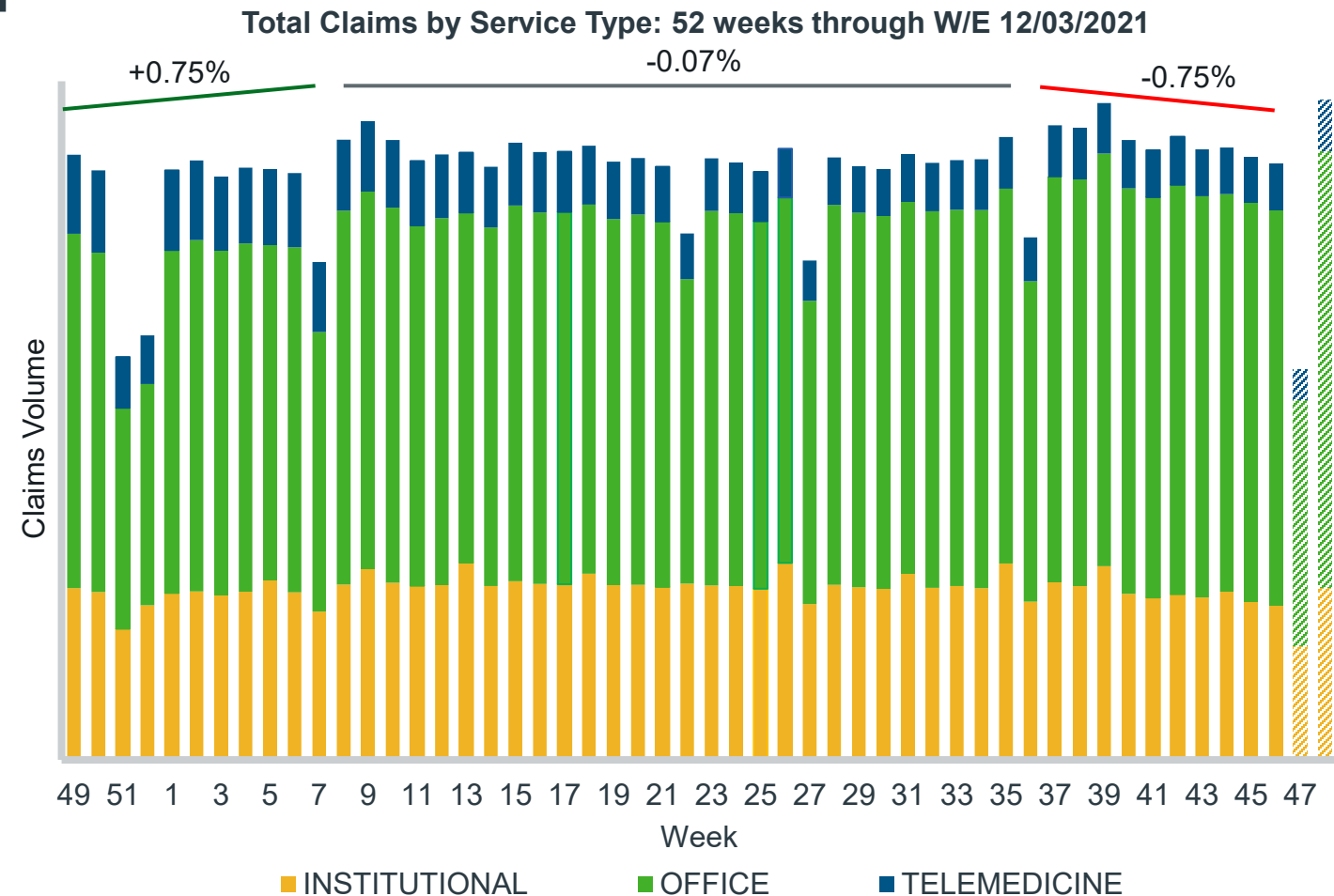


## What is “prescription suppression”?

*Difference between the number of prescriptions expected during a non-COVID scenario versus the number of prescriptions we actually see*

COVID-19 Diagnosis Visit Backlog - w/e May 28, 2021; Source: IQVIA: Medical Claims Data Analysis, 2021, IQVIA Analysis  
¹Suppressed monthly prescriptions are calculated by taking the predicted days supply using Dx visits and lever inputs and dividing by 30

# Telemedicine contribution to weekly medical claims growth continues to diminish, settling on 7.7% of total claims over the past 12 weeks



## Potential Implications

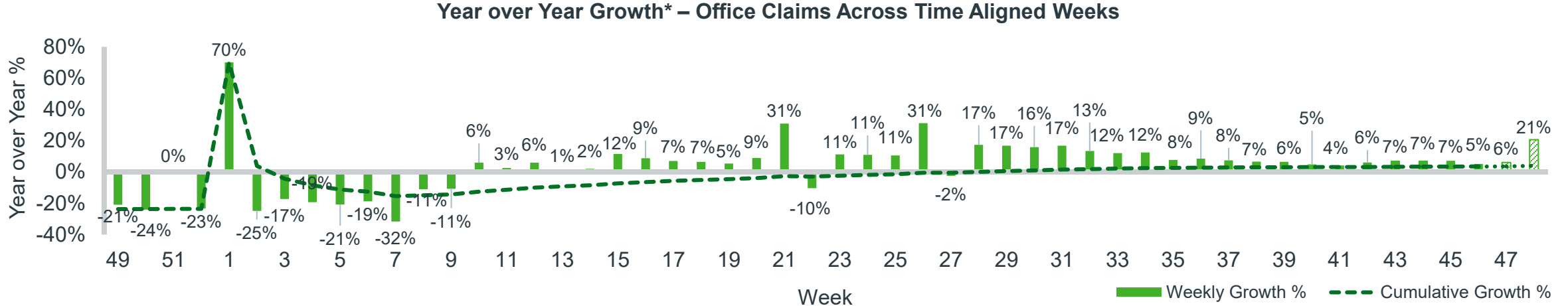
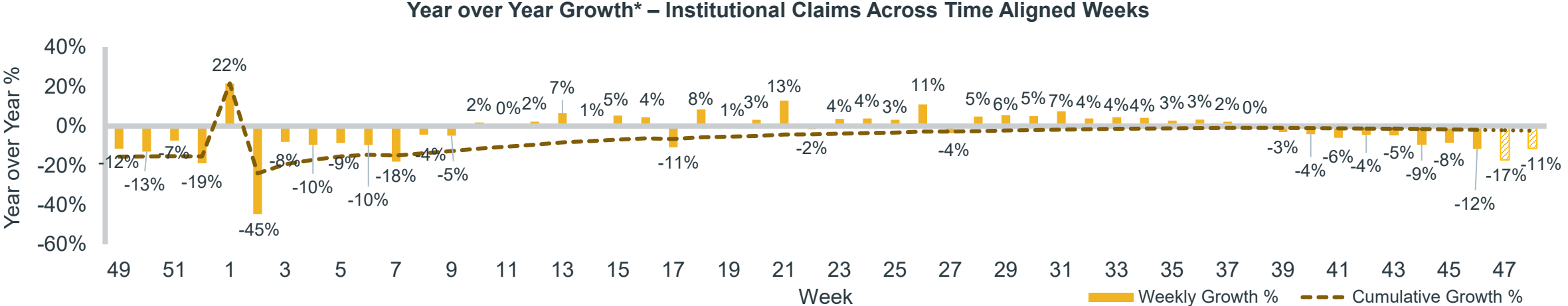


- Claims volume has continued to slow down since the start of fall, declining from the flatline we saw during spring and summer to now a  $\frac{3}{4}\%$  weekly drop from 9/17/2021 through 11/19/2021
- Institutional and Telemedicine claims are continuing to drop at the quickest pace, losing 1.5% and 1.3% per week over the same time period

*Data for latest week date controlled against prior periods; estimates have been applied to reflect anticipated late-adjudicated claims based on historical rates*

Source: IQVIA: Medical Claims Data Analysis, 2021; Week 48 2021 = 12/3/2021; Week 49 2020 = 12/11/2020; Week 48 2020 = 12/4/2020; Week 49 2019 = 12/13/2019  
Estimated amounts for latest weeks applied based on likely claims still to be received due to data latency or claim processing delays; See Appendix for further details

# Weekly institutional claims continue to stay below last year; recent weekly growth in office contributed to cumulative growth reaching parity with 2020

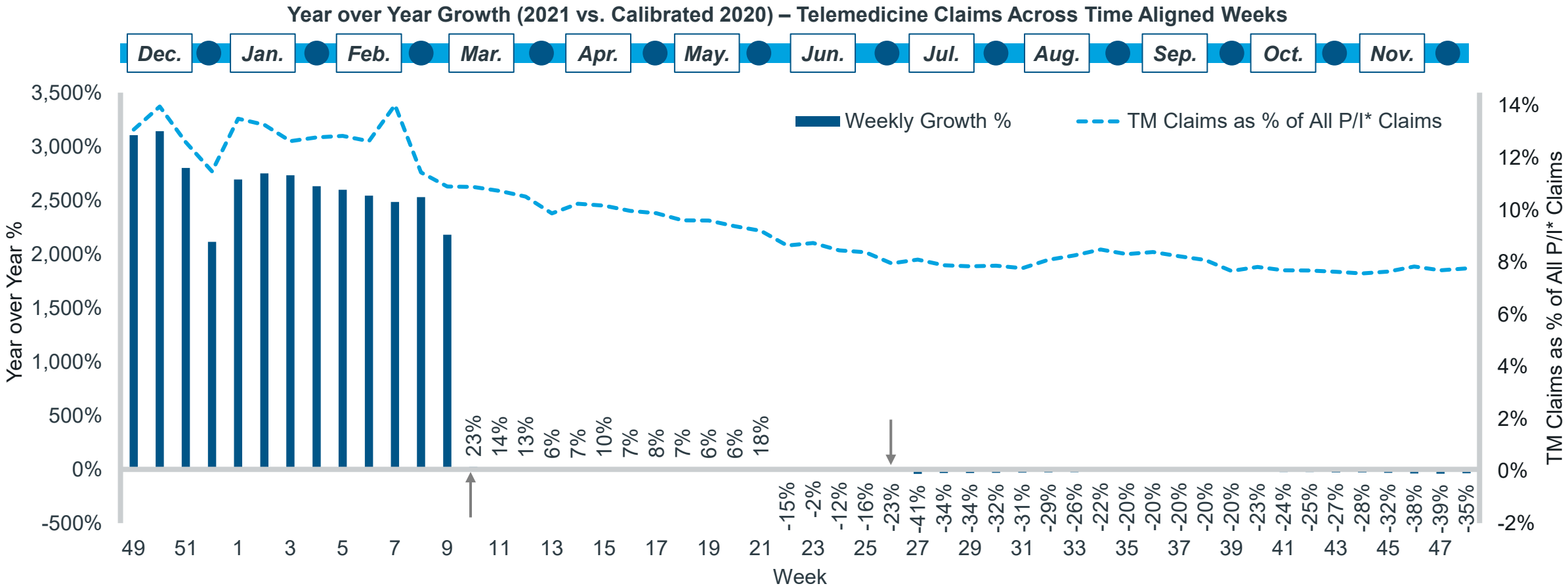


**Data for latest week date controlled against prior periods; estimates have been applied to reflect anticipated late-adjudicated claims based on historical rates**

Source: IQVIA: Medical Claims Data Analysis, 2021Week 48 2021 = 12/3/2021; Week 49 2020 = 12/11/2020; Week 48 2020 = 12/4/2020; Week 49 2019 = 12/13/2019  
Estimated amounts for latest weeks applied based on likely claims still to be received due to data latency or claim processing delays; See Appendix for further details  
\*Weekly and cumulative growth calculations continue to be evaluated against a “Calibrated” 2020, where weeks 10-25 are modified

# Telemedicine claims as a component of all claims fell back from the peak seen just following the Labor Day holiday

Week 10 begins the comparison to calibrated 2020 levels, then reverting to vs. actual in Week 26

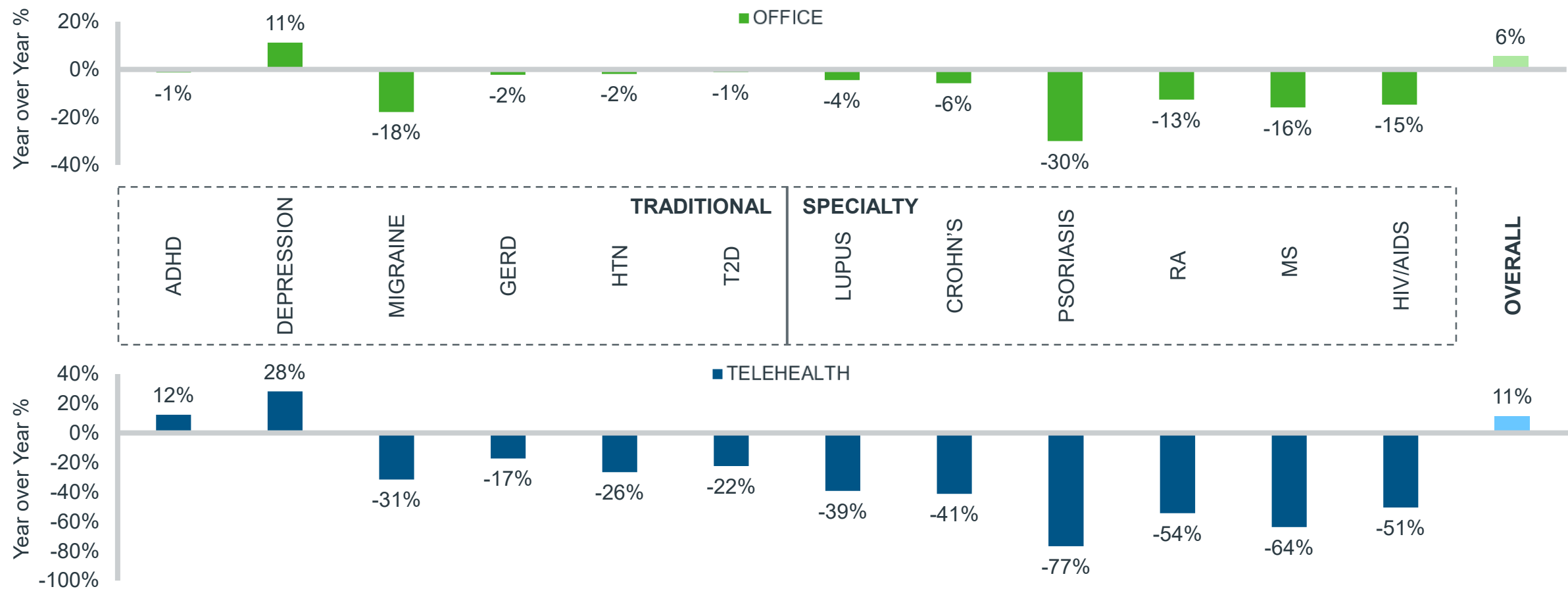


Data for latest week date controlled against prior periods; estimates have been applied to reflect anticipated late-adjudicated claims based on historical rates

\*All P/I Claims total indicates Telemedicine, Office, and Institutional claims  
Source: IQVIA: Medical Claims Data Analysis, 2021; Week 48 2021 = 12/3/2021; Week 49 2020 = 12/11/2020; Week 48 2020 = 12/4/2020; Week 49 2019 = 12/13/2019; Estimated amounts for latest weeks applied based on likely claims still to be received due to data latency or claim processing delays; See Appendix for further details

# Depression is the only specialty with YTD claims growth in both office and telemedicine settings

Diagnosis visit YoY Weekly YTD Growth\* – W/E 12/3/2021 vs. 12/4/2020

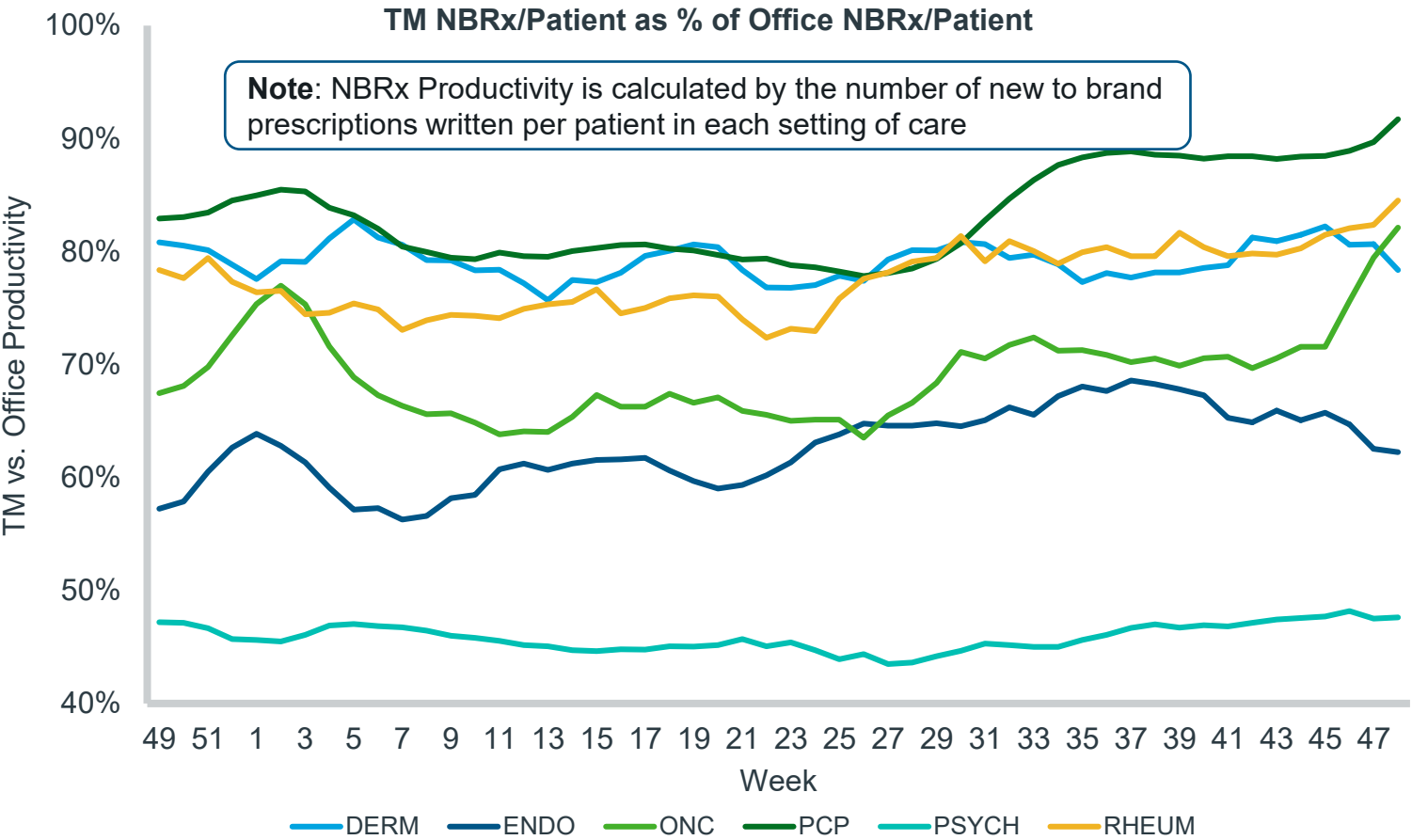


**Data for latest week date controlled against prior periods; estimates have been applied to reflect anticipated late-adjudicated claims based on historical rates**

Source: IQVIA: Medical Claims Data Analysis, 2021; Week 48 2021 = 12/3/2021; Week 49 2020 = 12/11/2020; Week 48 2020 = 12/4/2020; Week 49 2019 = 12/13/2019  
Latest two weeks are estimates using a recency data factor that is adjusted out as all claims are received; See Appendix for further details  
Week 10-25 continue to be evaluated against a "Calibrated" 2020 both for weekly and cumulative growth calculations

# Differences in NBRx productivity between telemedicine and office visits fluctuates for some specialties more than others

## Telemedicine vs. Office NBRx Productivity



## Potential Implications

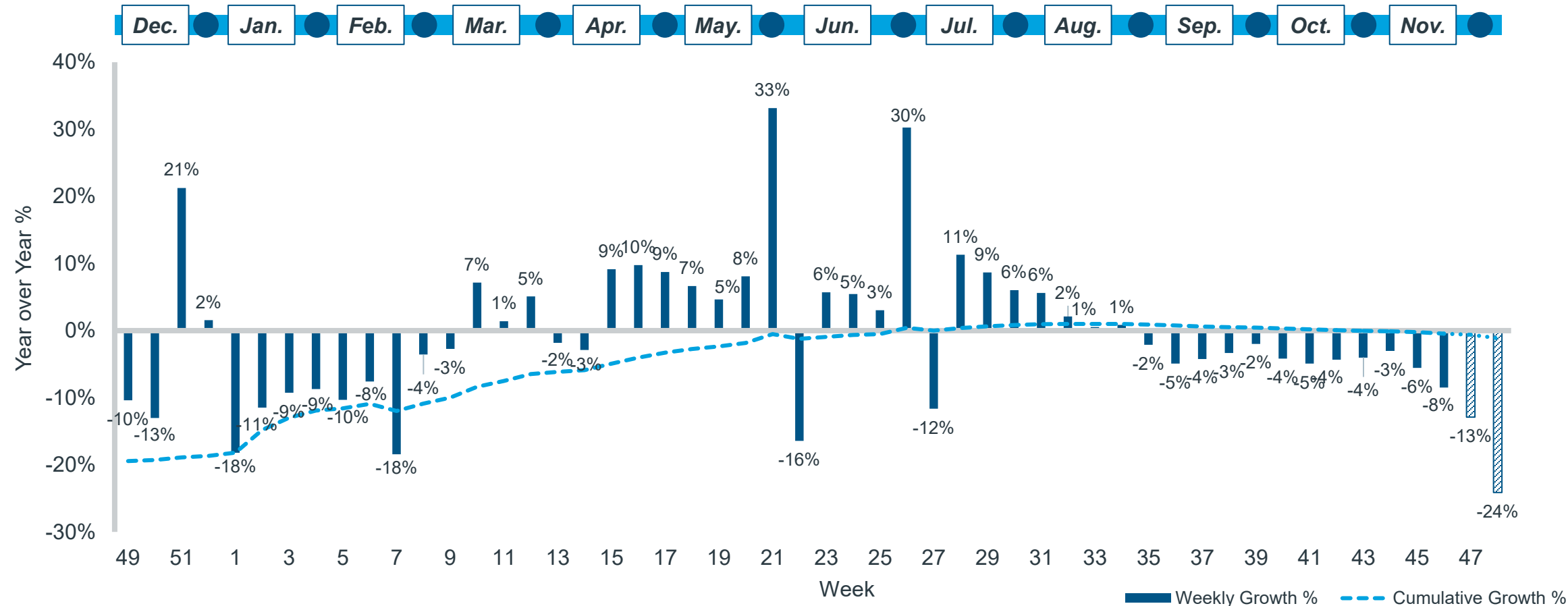


- No significant drop off in telemedicine productivity as a percentage of office productivity over time indicates both patients and HCPs are maintaining telemedicine as a venue for care
- PCPs, rheumatologists, and oncologists are experiencing rapid growth in telemedicine productivity relative to office over the past 12 weeks
- Despite the YTD growth in Depression diagnosis claims via telemedicine, Psychiatrists exhibit among the lowest telemedicine NBRx productivity levels

Source: NPA New To Brand (NPA NTB); Medical Claims analysis; 2021; Custom analysis; 4 week moving average, with Week 48 2021 = 12/3/2021; Week 49 2020 = 12/11/2020; Week 48 2020 = 12/4/2020; Week 49 2019 = 12/13/2019; Evaluation of medical claims visit with same patient/prescriber combination occurring as NBRx within 2 weeks of medical claim service date

# Elective procedures were stable throughout the summer

Year over Year Growth – Elective Procedure Across Time Aligned Weeks

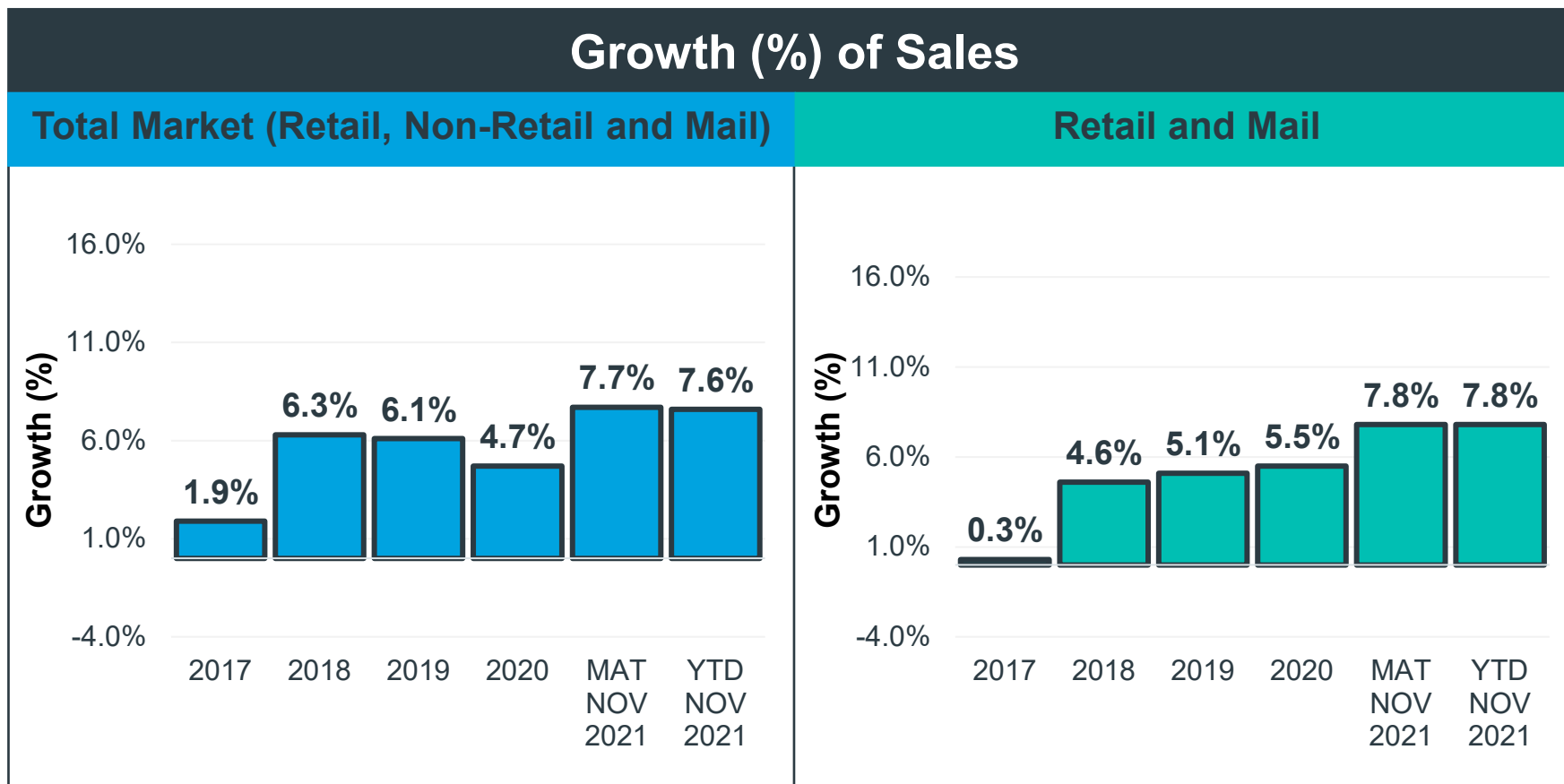


Source: IQVIA: Medical Claims Data Analysis, 2021; Week 48 2021 = 12/3/2021; Week 49 2020 = 12/11/2020; Week 48 2020 = 12/4/2020; Week 49 2019 = 12/13/2019; Elective procedures based on IQVIA custom analysis; Data includes claims from inpatient and outpatient sites of care; Latest two weeks are estimates using a recency data factor that is adjusted out as all claims are received; See Appendix for further details  
Week 10-25 continue to be evaluated against a "Calibrated" 2020 both for weekly and cumulative growth calculations



# Where Are We Now?

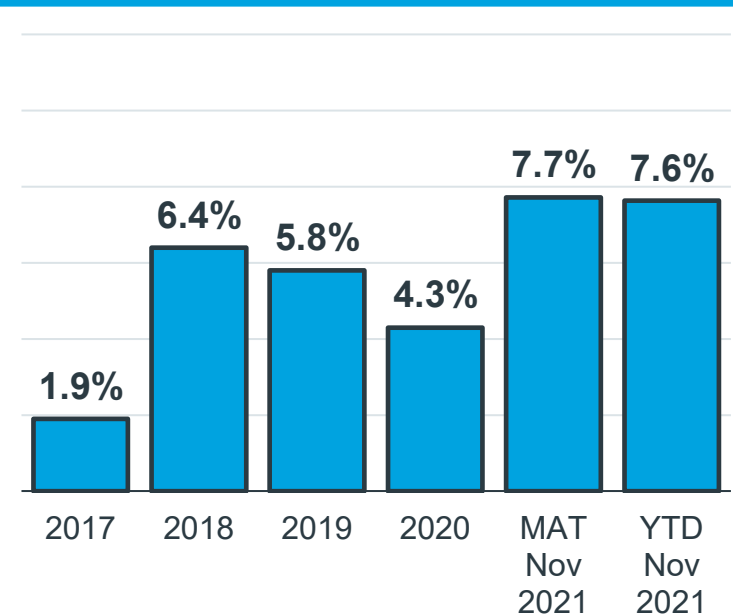
# Total US market dollar sales are growing



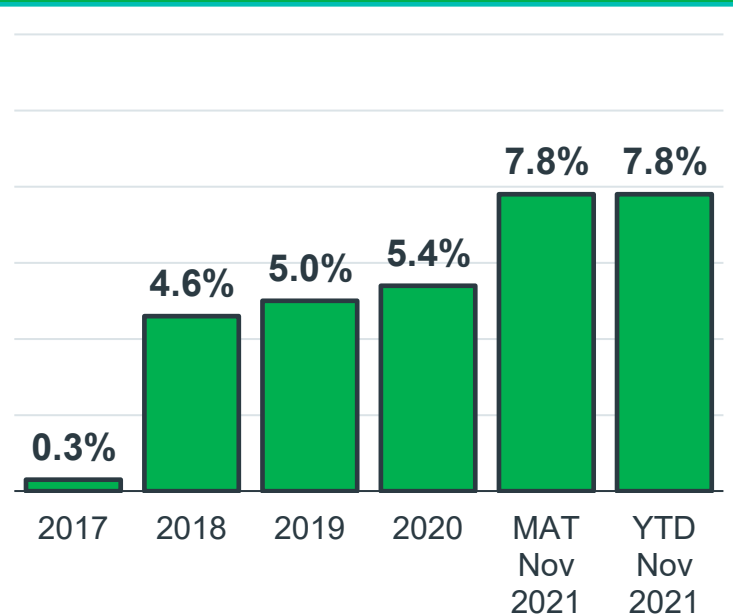
# All channels are outperforming last year

## Growth (%) of Sales

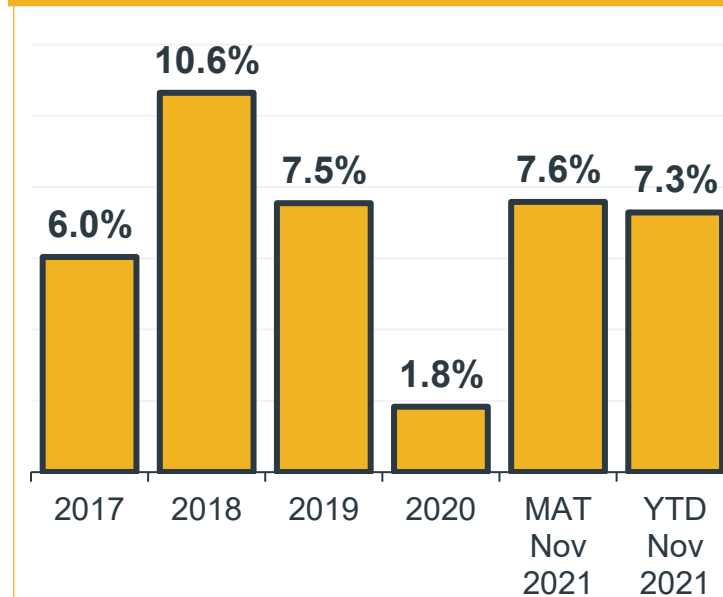
### Total Market (Retail, Non-Retail and Mail)



### Retail and Mail

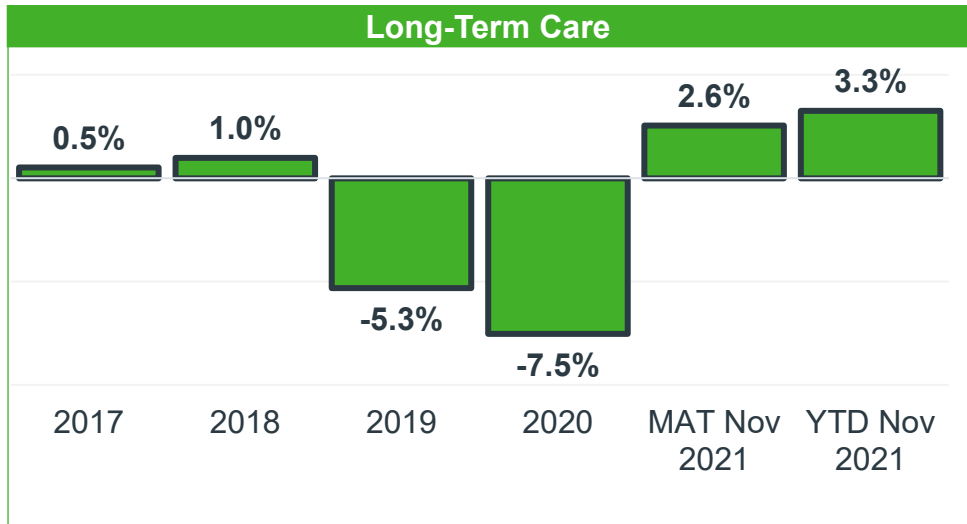
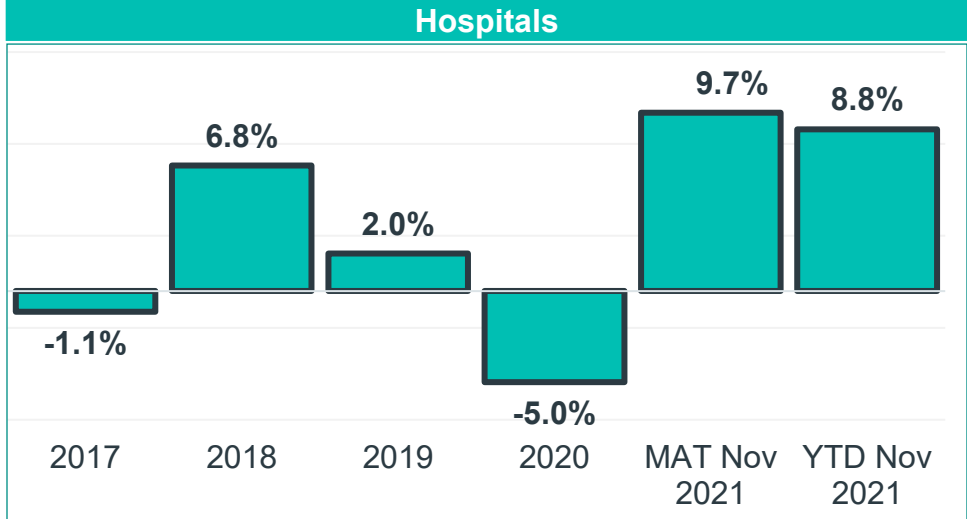
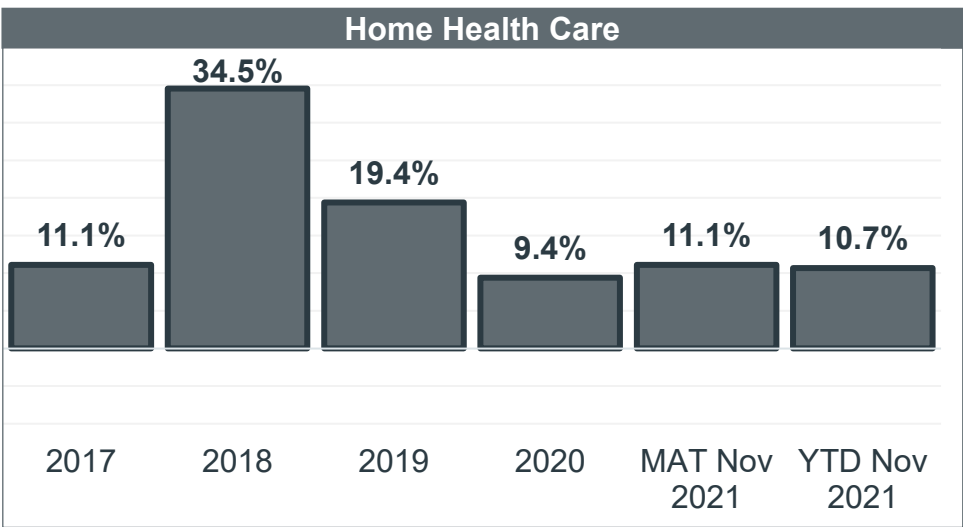
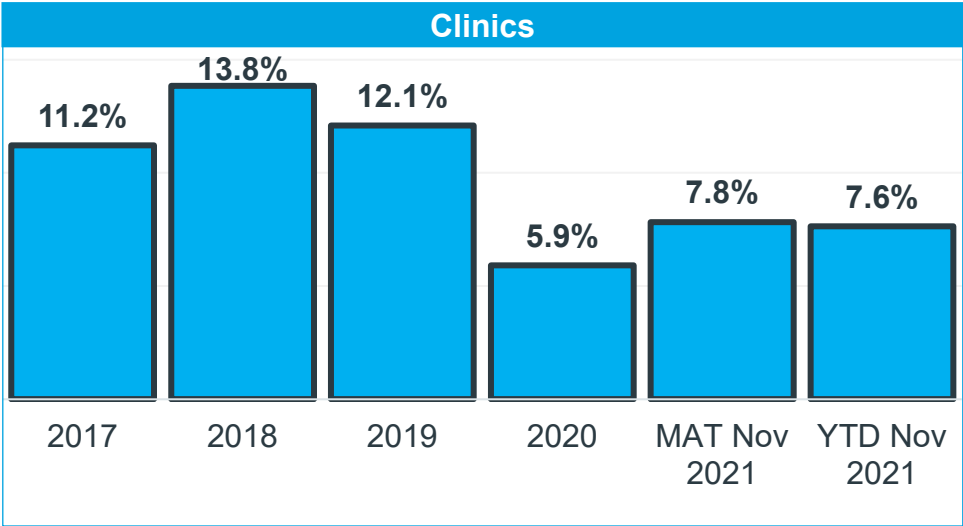


### Non-Retail



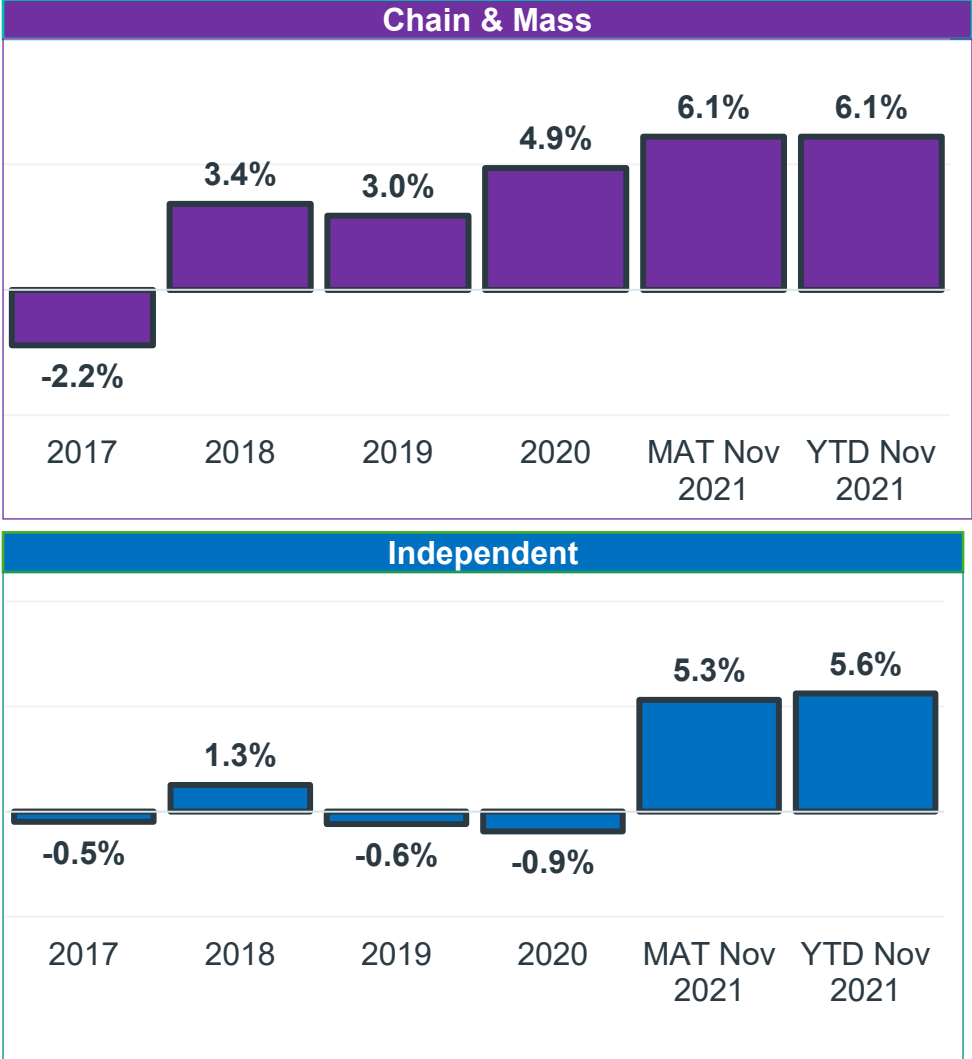
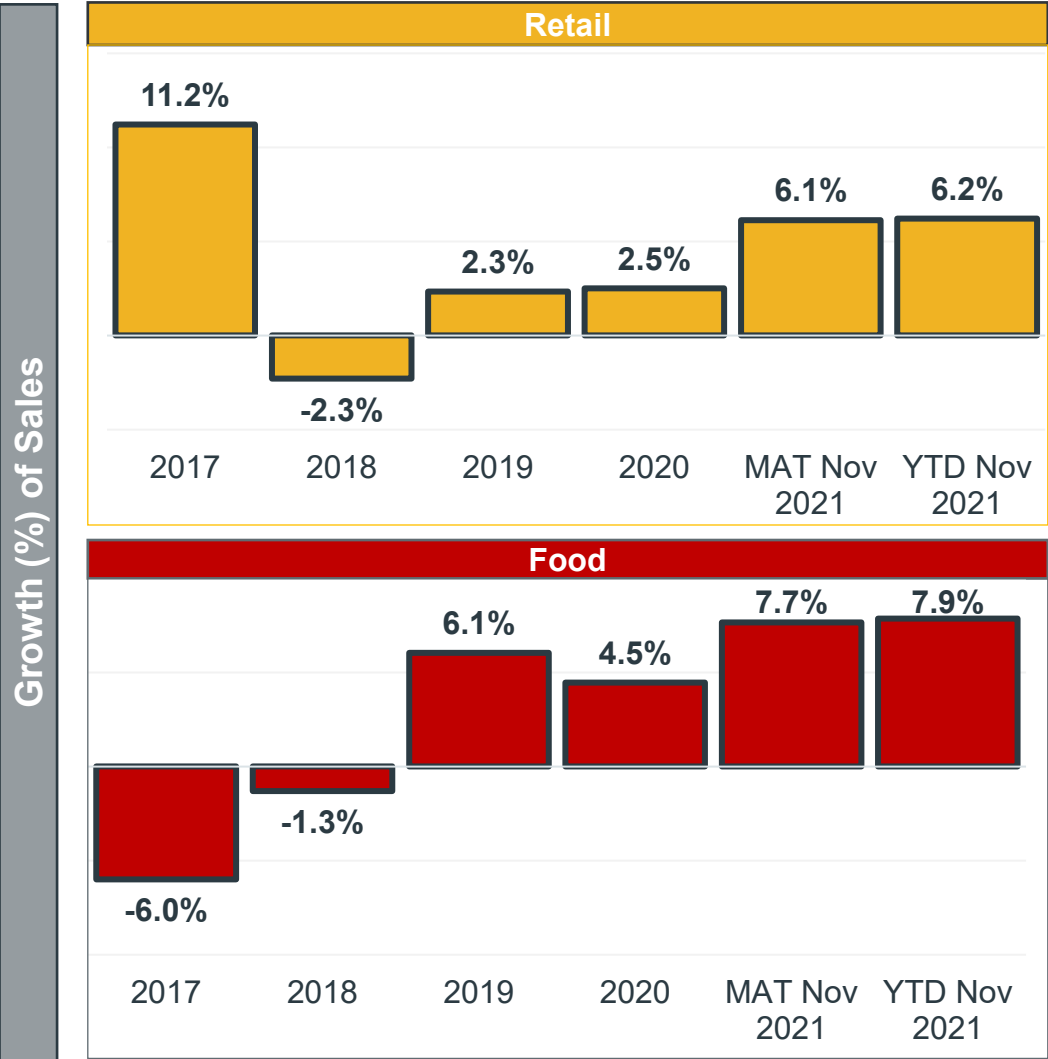
# Long Term Care is underperforming the other Non Retail Channels

Growth (%) of Sales



Source: IQVIA, National Sales Perspectives, November 2021  
Note: Limited to Rx and OTC Insulins; Includes Retail, Non-Retail and Mail

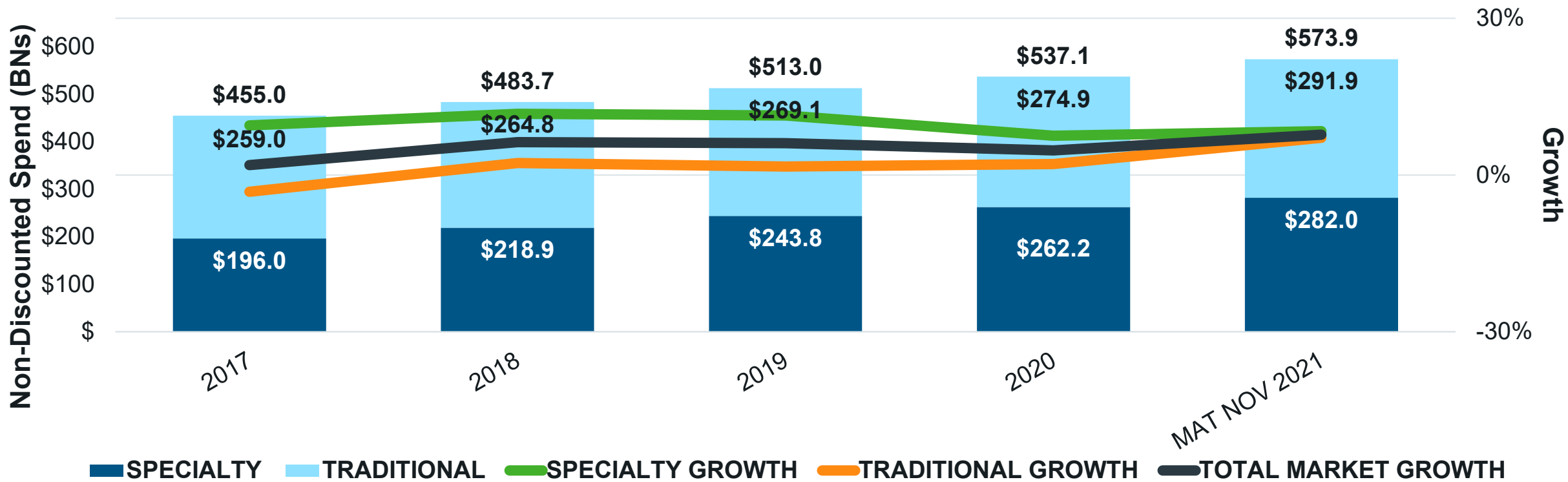
# All retail channels show growth from 2020



Source: IQVIA, National Sales Perspectives, November 2021  
Note: Limited to Rx and OTC Insulins; Includes Retail

# For the total market, specialty is outpacing traditional and now has ~49% share of total non-discounted spend

*In MAT November 2021, specialty spend grew by 8.4% while traditional growth grew 7.1%*

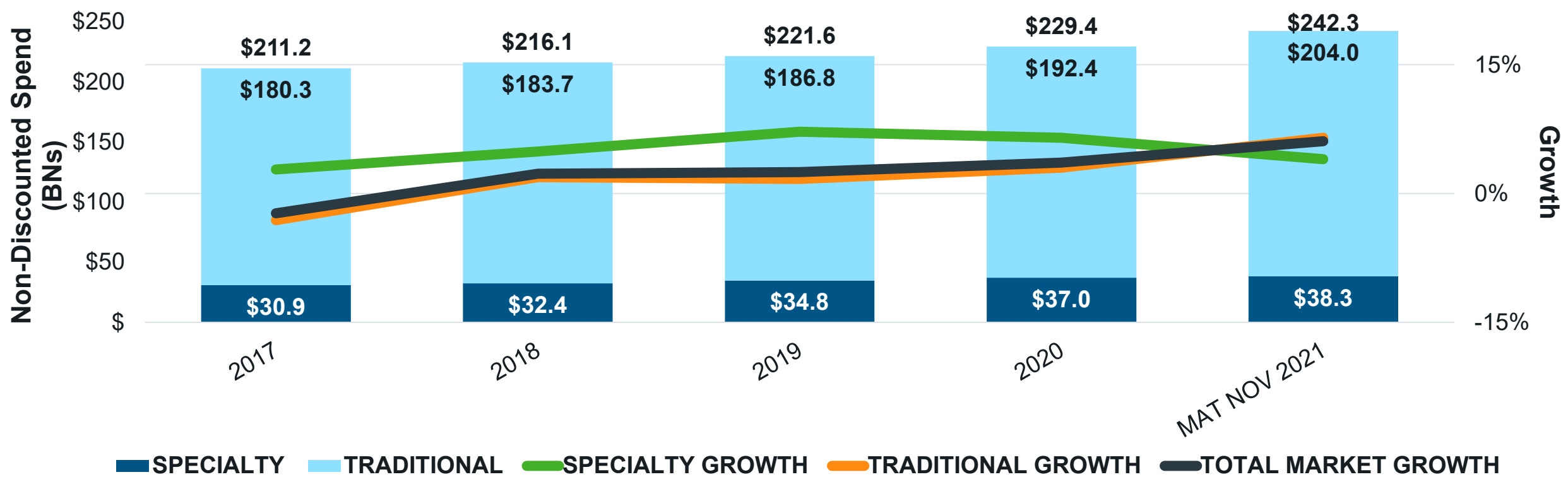


Share of Sales	2017	2018	2019	2020	MAT NOV 2021
SPECIALTY	43.1%	45.3%	47.5%	48.8%	49.1%
TRADITIONAL	56.9%	54.7%	52.5%	51.2%	50.9%



# For the retail channel, traditional growth is outpacing specialty growth and now has ~84% share of total non-discounted spend

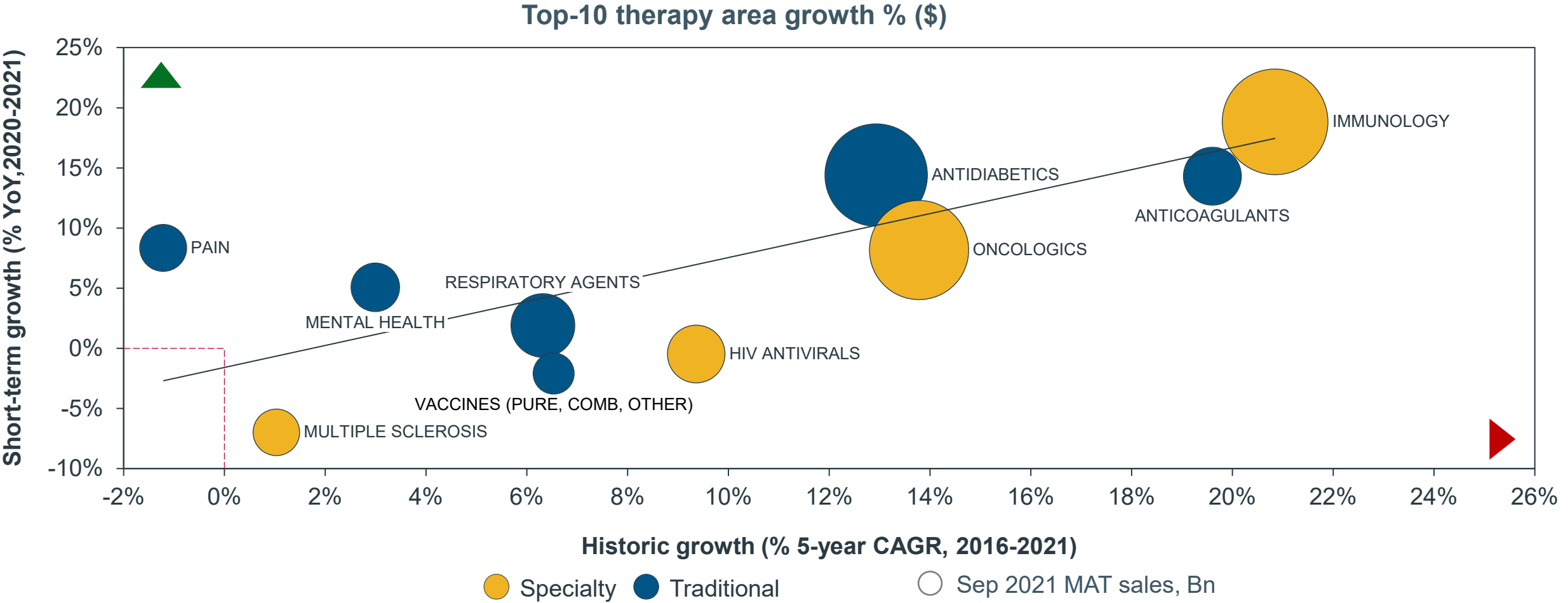
*In MAT November 2021, specialty spend increased 4.0% while traditional grew 6.5%*



Share of Sales	2017	2018	2019	2020	MAT NOV 2021
SPECIALTY	14.6%	15.0%	15.7%	16.1%	15.8%
TRADITIONAL	85.4%	85.0%	84.3%	83.9%	84.2%

# Immunology and Anticoagulants show the greatest one- and five-year growth in the US

Slowing growth was occurring prior to COVID-19, and is not the sole contributor

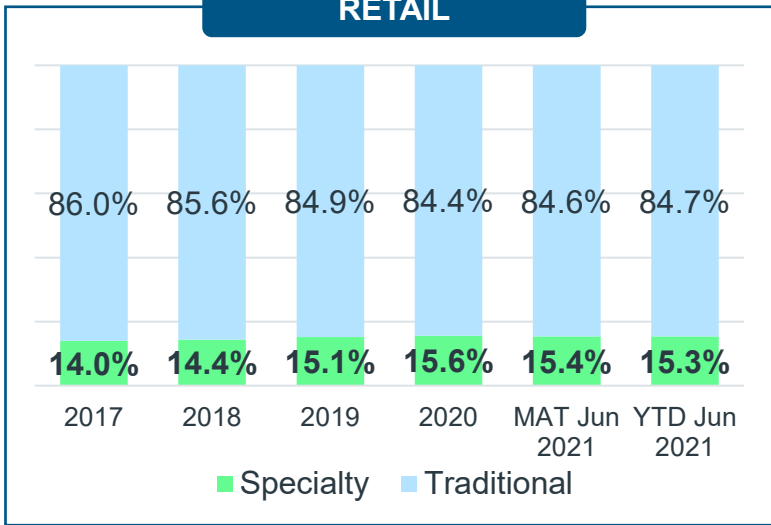




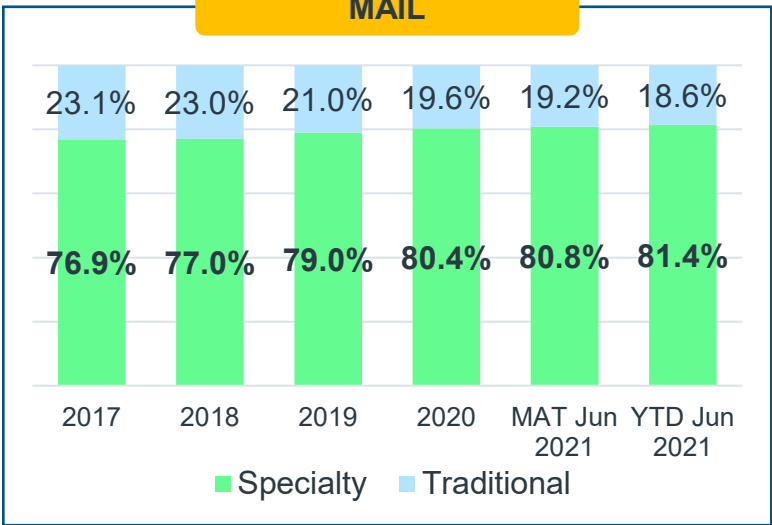
# Based on sales dollars, Specialty is increasing at Mail and Non-Retail while slowing at Retail

% OF SALES \$

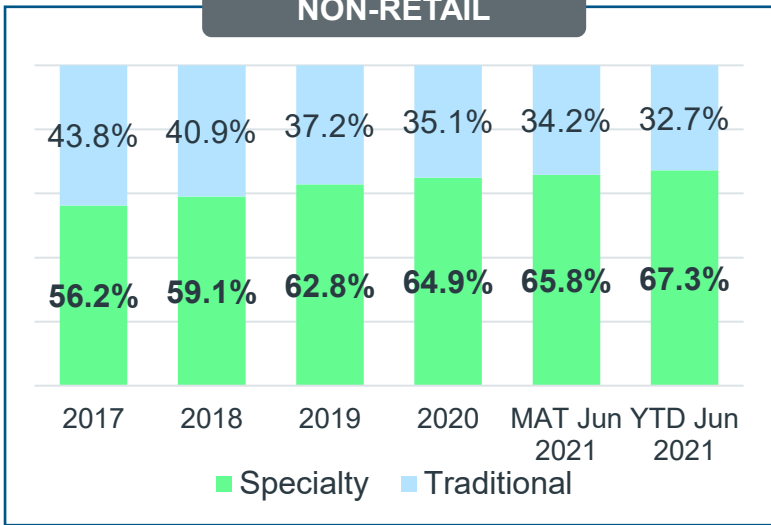
## RETAIL



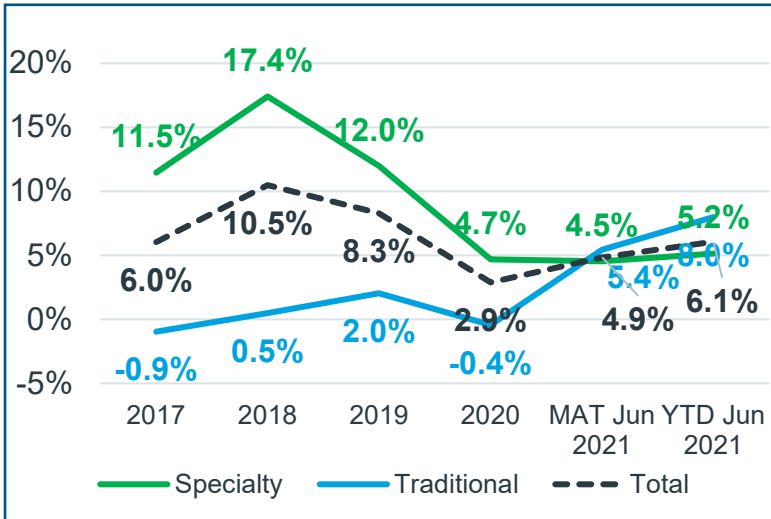
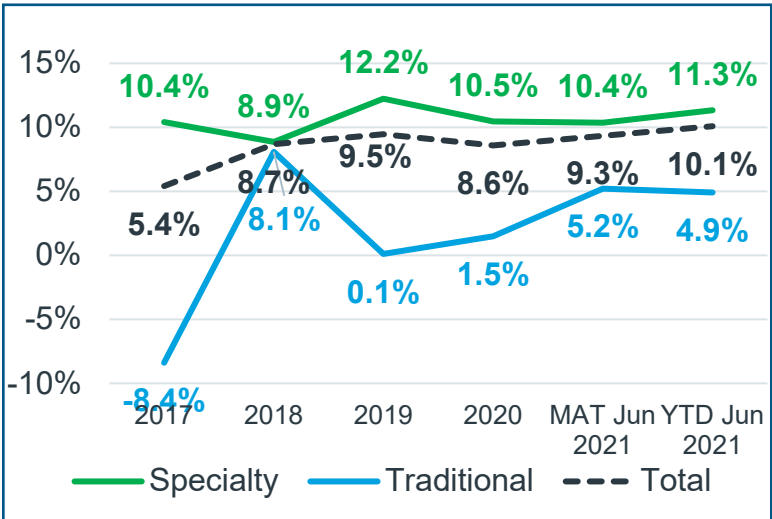
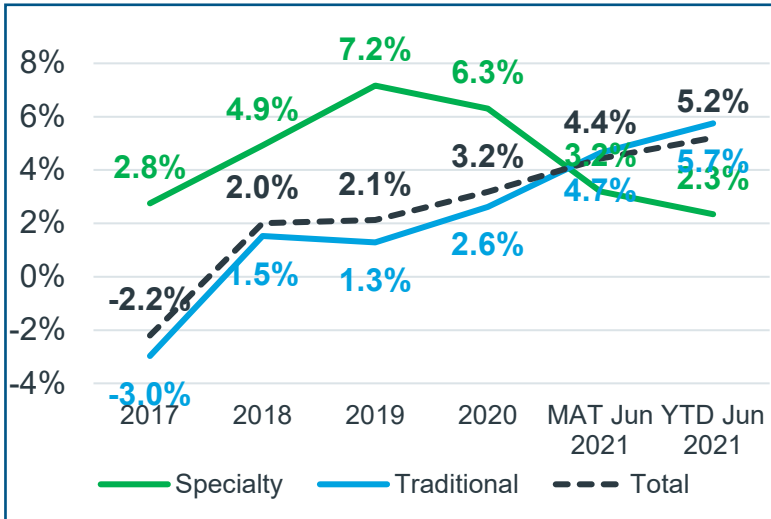
## MAIL



## NON-RETAIL



YOY SALES \$ GROWTH



Data is based on Rx and OTC Insulins only

# Immunology showed greatest Specialty growth on spend in Mail

## Top 10 Specialty Therapies for Retail, Mail, and Non-Retail - MAT June 2021 (in \$ billions)

RETAIL			MAIL			NON-RETAIL		
Therapy	MAT June 2021	YoY Growth	Therapy	MAT June 2021	YoY Growth	Therapy	MAT June 2021	YoY Growth
HIV ANTIVIRALS	16.4	1.5%	IMMUNOLOGY	61.0	20.3%	ONCOLOGICS	52.8	7.0%
IMMUNOLOGY	7.7	9.5%	ONCOLOGICS	20.2	9.1%	IMMUNOLOGY	15.6	9.9%
ONCOLOGICS	2.3	-3.0%	MULTIPLE SCLEROSIS	11.3	-10.2%	MULTIPLE SCLEROSIS	5.2	4.0%
MENTAL HEALTH	2.2	6.6%	HIV ANTIVIRALS	5.1	-0.6%	POLYVAL IMMUNOGLOBULINS IV&IM	4.6	5.6%
ANTI-INFLAMMATORY AND DIGESTIVE ENZYMES AND MODULA	2.0	11.3%	ALL OTHER RESPIRATORY	3.8	21.6%	HIV ANTIVIRALS	4.5	2.0%
VIRAL HEPATITIS	1.2	-16.3%	OTHER CARDIOVASCULARS	2.3	13.1%	HEMATOPOIETIC GROWTH FACTORS	3.8	-11.6%
LIPID REGULATORS	1.0	35.9%	GROWTH HORMONES	2.2	0.2%	ERYTHROPOIETINS	2.7	-9.6%
MULTIPLE SCLEROSIS	0.7	-10.5%	RESPIRATORY AGENTS	2.2	13.4%	MENTAL HEALTH	2.1	9.3%
SEX HORMONES (ANDROGENS, OESTROGENS, PROGESTOGENS)	0.6	21.3%	VIRAL HEPATITIS	2.1	-20.9%	OCULAR ANTINEOVASCULARISATION	1.9	-9.5%
IMMUNOSUPPRESSANTS	0.5	-6.3%	BLOOD COAGULATION	1.9	0.5%	RESPIRATORY AGENTS	1.9	14.2%

Source: IQVIA, National Sales Perspectives, June 2021

Limited to Rx and OTC Insulins

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# Antidiabetics is the top therapy class and Eliquis is a top product in the Retail Market based on sales dollars

## Top 10 Therapies and Products for Retail based on Sales - MAT June 2021 (MAT in Billions)

Therapies			
Rank	Therapy	MAT June 2021	YoY Growth
1	ANTIDIABETICS	64.0	13.9%
2	RESPIRATORY AGENTS	21.6	-0.1%
3	ANTICOAGULANTS	18.1	16.2%
4	HIV ANTIVIRALS	16.4	1.5%
5	MENTAL HEALTH	13.3	6.4%
6	PAIN	10.2	8.1%
7	ADHD	8.1	0.1%
8	IMMUNOLOGY	7.7	9.6%
9	GI PRODUCTS	6.8	5.1%
10	NERVOUS SYSTEM DISORDERS	6.5	-6.1%

Products			
Rank	Product	MAT June 2021	YoY Growth
1	ELIQUIS	10.9	25.5%
2	TRULICITY	8.5	37.2%
3	OZEMPIC	5.6	70.9%
4	JARDIANCE	5.6	40.7%
5	XARELTO	5.4	9.1%
6	BIKTARVY	5.2	27.6%
7	JANUVIA	5.0	3.8%
8	LANTUS SOLOSTAR	4.0	17.2%
9	VYVANSE	3.7	2.8%
10	LATUDA	3.3	11.4%

Source: IQVIA, National Sales Perspectives, June 2021  
Limited to Rx and OTC Insulins

# Farxiga and Trelegy Ellipta show large YoY growth

## Top 20 Therapies and Products for Retail based on Sales - MAT June 2021 (MAT in Billions)

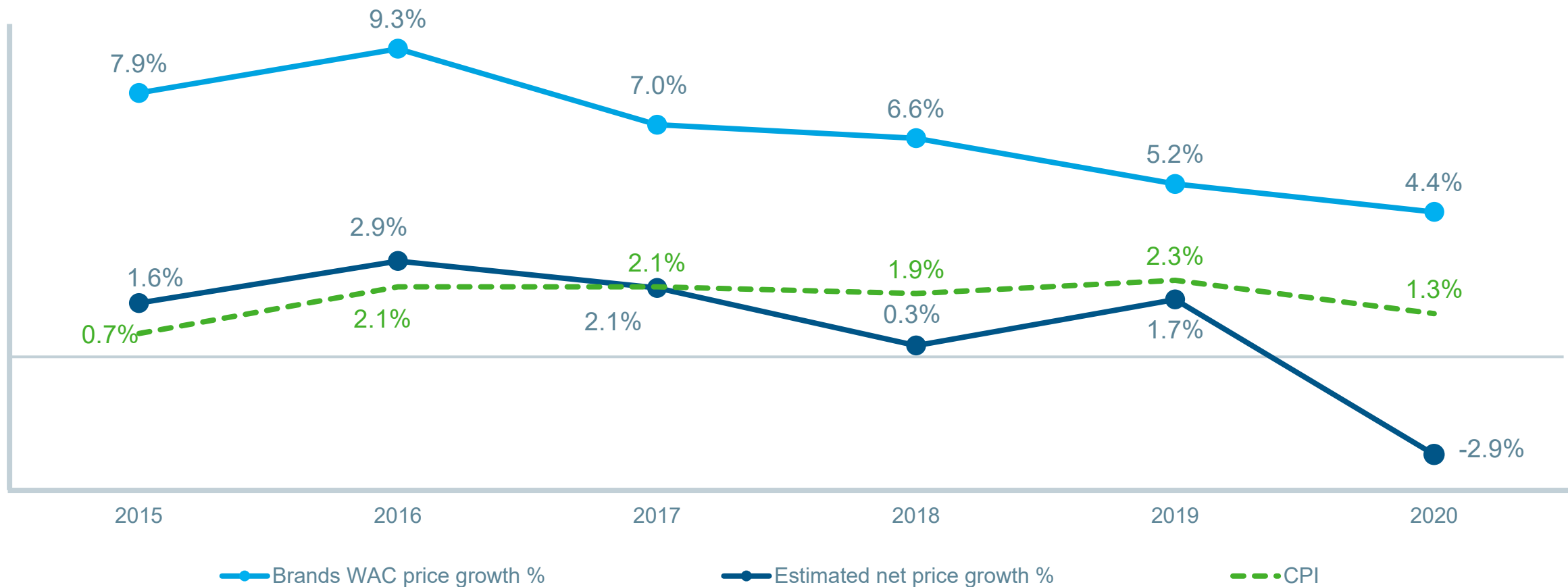
Therapies			
Rank	Therapy	MAT June 2021	YoY Growth
11	ANTIHYPERTENSIVES, PLAIN & COMBO	5.9	3.5%
12	DERMATOLOGICS	5.3	-9.4%
13	OTHER CNS	4.6	-4.3%
14	OPHTHALMOLOGY, GENERAL	4.1	1.1%
15	VACCINES (PURE, COMB, OTHER)	3.7	10.5%
16	OTHER CARDIOVASCULARS	3.6	9.7%
17	HORMONAL CONTRACEPTION, SYSTEMIC&TOPICAL	3.3	-9.4%
18	SEX HORMONES (ANDROGENS, OESTROGENS, PROGESTOGENS)	3.1	-0.9%
19	LIPID REGULATORS	2.5	5.9%
20	ONCOLOGICS	2.4	-3.5%

Products			
Rank	Product	MAT June 2021	YoY Growth
11	HUMIRA	2.9	3.9%
12	SYMBICORT	2.9	-6.8%
13	VICTOZA 3-PAK	2.6	-7.3%
14	NOVOLOG FLEXPEN	2.6	-8.5%
15	TRESIBA	2.6	1.3%
16	FARXIGA	2.4	48.4%
17	TRELEGY ELLIPTA	2.1	56.3%
18	HUMALOG KWIKPEN	2.0	-4.6%
19	BREO ELLIPTA	2.0	-6.5%
20	GENVOYA	1.9	-11.5%

Source: IQVIA, National Sales Perspectives, June 2021  
Limited to Rx and OTC Insulins

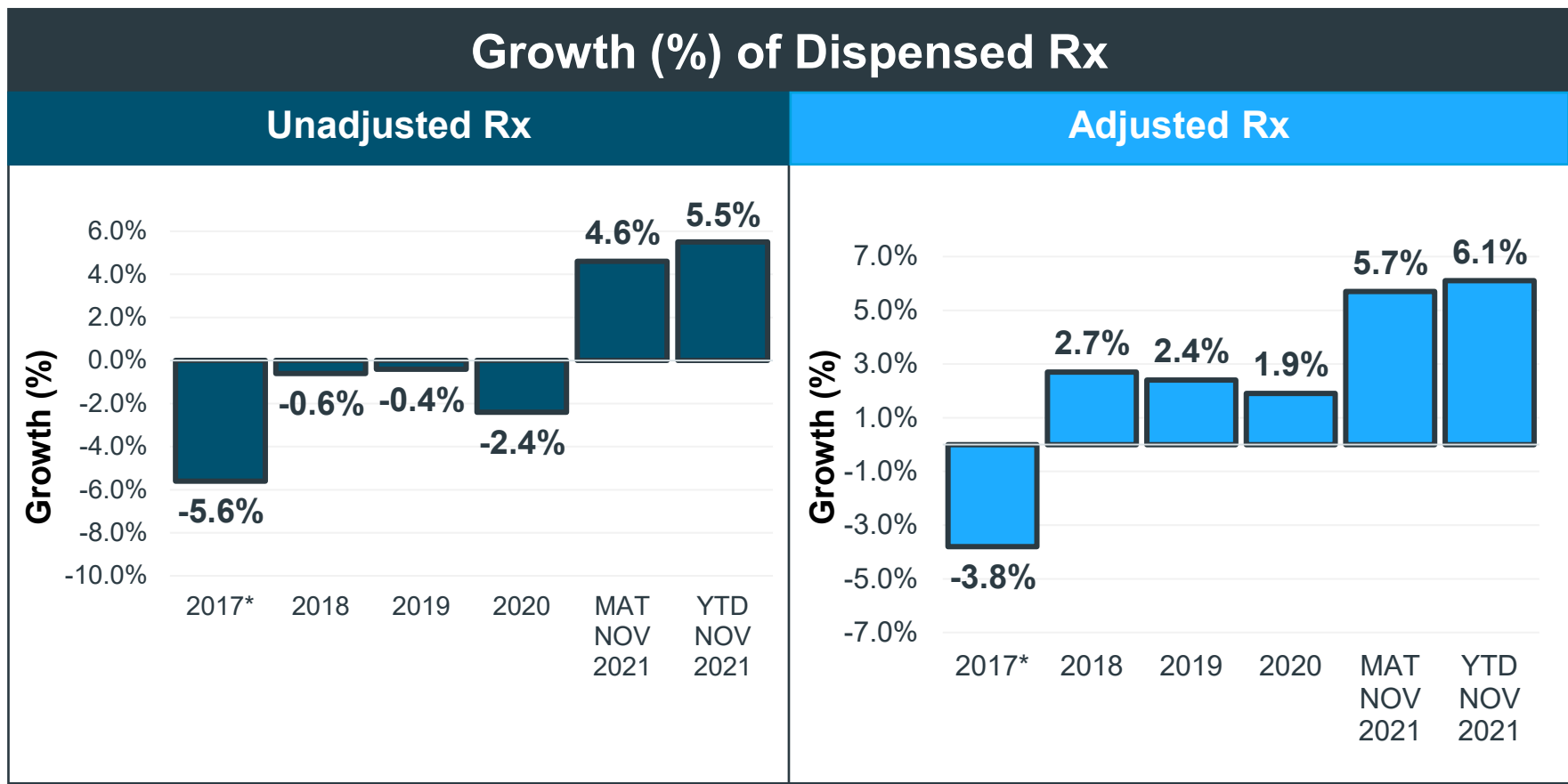
# Protected brand list prices increased 4.4% in 2020, while net prices decreased -2.9% - the fourth year at or below the CPI

Wholesaler Acquisition Cost (WAC) Growth and Net Price Growth for Protected Brands



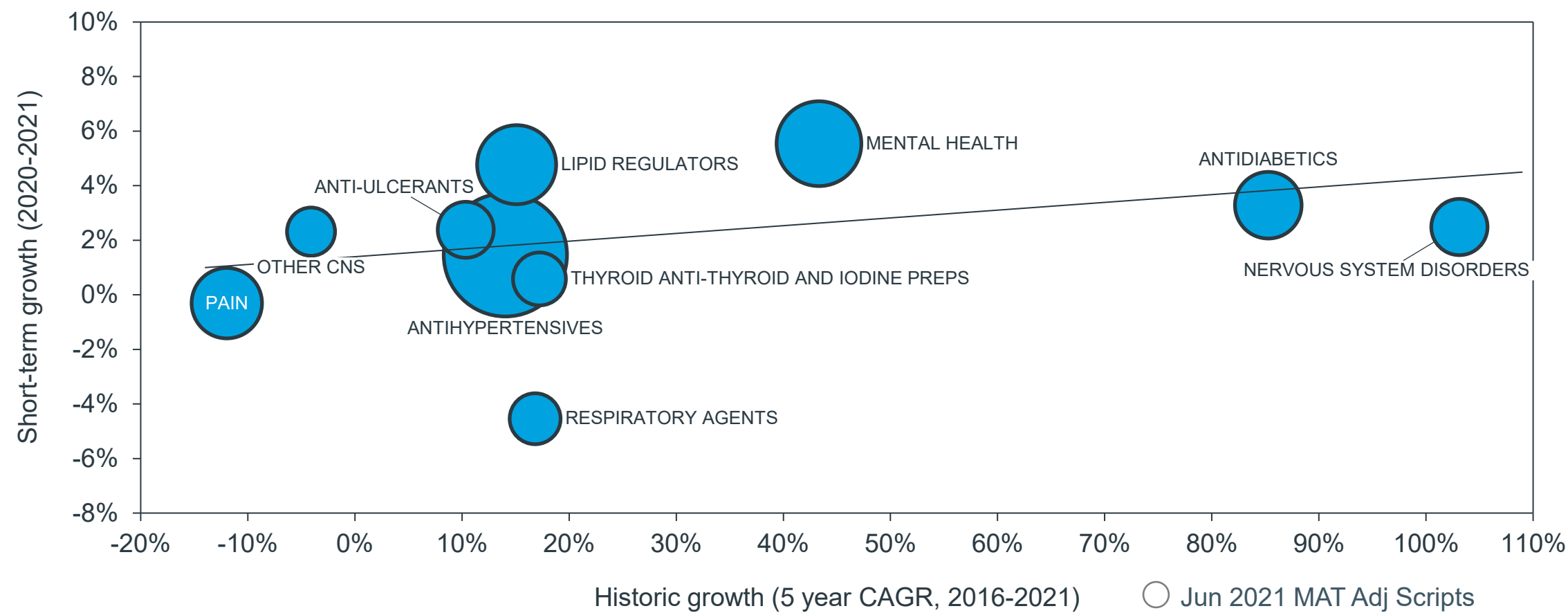
Source: IQVIA Institute, National Sales Perspectives, Dec 2020; Bureau of Labor Statistics, CPI Data, Dec 2015–Dec 2020

# Unadjusted and Adjusted Rx growth are positive



# Nervous system disorders 5-year growth is high, but short-term growth is minimal

*Pain shows negative growth for one and five-year growth*



IQVIA Xponent® June 2021, Retail, Mail and LTC

# On a script basis, the top 10 therapy areas are growing at 5.8% adjusted and at 4.6% unadjusted

Rank	Therapy Area	Adjusted Scripts (MNs)				Unadjusted Scripts (MNs)			
		MAT SEP 2021	Market Share	ABS Growth	Growth	MAT SEP 2021	Market Share	ABS Growth	Growth
1	ANTIHYPERTENSIVES	1,260.7	20.1%	16.3	1.3%	637.7	15.1%	-20.1	-3.1%
2	MENTAL HEALTH	601.2	9.6%	31.1	5.5%	409.4	9.7%	9.3	2.3%
3	LIPID REGULATORS	523.8	8.4%	26.1	5.3%	249.4	5.9%	2.5	1.0%
4	PAIN	406.4	6.5%	1.5	0.4%	371.8	8.8%	0.1	0.0%
5	ANTIDIABETICS	372.8	6.0%	17.4	4.9%	215.6	5.1%	3.1	1.4%
6	ANTI-ULCERANTS	260.1	4.2%	11.8	4.8%	152.3	3.6%	1.3	0.8%
7	NERVOUS SYSTEM DISORDERS	259.6	4.1%	6.1	2.4%	197.2	4.7%	0.9	0.5%
8	THYROID ANTI-THYROID AND IODINE PREPS	229.9	3.7%	1.8	0.8%	118.6	2.8%	-4.1	-3.4%
9	RESPIRATORY AGENTS	215.4	3.4%	-8.5	-3.8%	167.8	4.0%	-11.6	-6.5%
10	VACCINES	203.4	3.2%	135.8	201.1%	202.8	4.8%	138.4	214.6%
TOP 10		4,333.3	69.2%	239.4	5.8%	2,722.5	64.5%	119.7	4.6%



# On a script basis, the top 20 therapy areas are growing at 4.6% adjusted and at 2.9% unadjusted

Rank	Therapy Area	Adjusted Scripts (MNs)				Unadjusted Scripts (MNs)			
		MAT SEP 2021	Market Share	ABS Growth	Growth	MAT SEP 2021	Market Share	ABS Growth	Growth
11	ANTIBACTERIALS	196.6	3.1%	-23.0	-10.5%	193.1	4.6%	-23.2	-10.7%
12	OTHER CNS	190.2	3.0%	3.6	1.9%	172.0	4.1%	1.5	0.9%
13	HORMONAL CONTRACEPTION	126.2	2.0%	-0.2	-0.1%	68.4	1.6%	-4.1	-5.6%
14	ANTICOAGULANTS	123.8	2.0%	2.0	1.7%	75.4	1.8%	-1.0	-1.3%
15	DERMATOLOGICS	121.6	1.9%	7.5	6.6%	116.5	2.8%	6.9	6.3%
16	ADHD	109.8	1.8%	5.7	5.5%	99.4	2.4%	4.6	4.9%
17	VITAMINS & MINERALS	108.6	1.7%	4.7	4.5%	66.1	1.6%	0.2	0.3%
18	BPH	87.5	1.4%	3.3	3.9%	44.3	1.0%	0.0	0.1%
19	CORTICOSTEROIDS	71.9	1.1%	-1.5	-2.0%	66.5	1.6%	-1.7	-2.4%
20	OTHER CARDIOVASCULARS	67.5	1.1%	1.6	2.4%	44.2	1.0%	0.1	0.1%
TOP 20		5,537.0	88.4%	243.0	4.6%	3,668.3	86.9%	103.1	2.9%

# Vaccines show greatest gains; Respiratory Agents show greatest losses

Therapy Classes: Retail Unadjusted Rx's for 2021

## Highest Gains

Therapy Class	2021	Abs Growth	YoY Growth
VACCINES (PURE, COMB, OTHER)	271.3	203.6	301.1%
ANTIBACTERIALS	194.6	8.9	4.8%
MENTAL HEALTH	336.2	8.3	2.5%
DERMATOLOGICS	109.1	7.7	7.6%
CORTICOSTEROIDS, PLAIN & COMBO	66.3	6.7	11.2%
ADHD	96.1	6.3	7.0%
CANCER DETOX AG, ANTI-NAUSEANTS	33.9	3.8	12.7%
ANTI-ULCERANTS	126.6	3.4	2.8%
ERECTILE DYSFUNCTION	18.4	3.2	20.8%
GI PRODUCTS	49.6	3.0	6.5%

## Highest Losses

Therapy Class	MAT	Abs Growth	YoY Growth
ANTIHYPERTENSIVES, PLAIN & COMBO	525.9	-12.5	-2.3%
COUGH COLD, INCL FLU ANTIVIRALS	20.4	-7.1	-25.8%
RESPIRATORY AGENTS	150.9	-5.3	-3.4%
HORMONAL CONTRACEPTION, SYSTEMIC&TOPICAL	63.4	-4.6	-6.8%
THYROID ANTI-THYROID AND IODINE PREPS	96.9	-3.3	-3.3%
NASAL PREPS, TOPICAL	34.3	-0.8	-2.2%
ANTIGOUT PREPS	17.2	-0.2	-1.3%
ANTI-ANAEMICS, IRON AND ALL COMBINATIONS	10.9	-0.2	-1.7%
OSTEOPOROSIS	10.8	-0.1	-1.2%
ANTI-ALZHEIMERS	9.4	-0.1	-1.0%

Rx's are Retail unadjusted and are shown in Millions;  
Growth is based on Absolute Growth 2021

# On a script basis, the top 10 products are growing at 3.3% adjusted and declining at -0.9% unadjusted

Rank	Product	Adjusted Scripts (MNs)				Unadjusted Scripts (MNs)			
		MAT SEP 2021	Market Share	ABS Growth	Growth	MAT SEP 2021	Market Share	ABS Growth	Growth
1	ATORVASTATIN CA	256.5	4.1%	17.3	7.2%	123.9	2.9%	3.2	2.7%
2	LISINOPRIL	180.0	2.9%	0.1	0.1%	89.1	2.1%	-4.3	-4.6%
3	AMLODIPINE BESY	179.9	2.9%	8.9	5.2%	89.6	2.1%	0.2	0.2%
4	LEVOTHYROXINE SOD	163.2	2.6%	-2.5	-1.5%	84.0	2.0%	-5.4	-6.0%
5	LOSARTAN POT	123.8	2.0%	4.9	4.1%	59.6	1.4%	-0.3	-0.5%
6	METFORMIN HCL	114.4	1.8%	3.1	2.8%	58.4	1.4%	-0.8	-1.4%
7	METOPROLOL SUCCIN	103.1	1.6%	7.6	7.9%	50.4	1.2%	1.3	2.7%
8	OMEPRAZOLE (RX)	99.7	1.6%	7.9	8.6%	56.3	1.3%	2.2	4.1%
9	HYDROCHLOROTHIAZIDE	96.5	1.5%	-5.4	-5.3%	46.4	1.1%	-4.5	-8.9%
10	GABAPENTIN	93.7	1.5%	2.7	3.0%	70.2	1.7%	1.5	2.2%
TOP 10		1,410.8	22.5%	44.7	3.3%	727.9	17.2%	-6.9	-0.9%

# On a script basis, the top 20 products are growing at 7.9% adjusted and at 7.4% unadjusted

Rank	Product	Adjusted Scripts (MNs)				Unadjusted Scripts (MNs)			
		MAT SEP 2021	Market Share	ABS Growth	Growth	MAT SEP 2021	Market Share	ABS Growth	Growth
11	COMIRNATY (Pfizer Vaccine)	86.7	1.4%	86.7	0.0%	86.7	2.1%	86.7	+++%
12	ROSUVASTATIN CAL	83.0	1.3%	14.6	21.4%	38.5	0.9%	5.4	16.3%
13	SERTRALINE HCL	82.3	1.3%	5.0	6.4%	53.1	1.3%	1.6	3.2%
14	PANTOPRAZOLE SOD	77.4	1.2%	7.1	10.0%	45.1	1.1%	2.5	5.9%
15	SIMVASTATIN	71.5	1.1%	-6.1	-7.8%	32.2	0.8%	-4.2	-11.5%
16	ESCITALOPRAM OXAL	69.5	1.1%	6.6	10.5%	44.1	1.0%	2.7	6.6%
17	MONTELUKAST SOD	64.7	1.0%	-0.8	-1.2%	37.2	0.9%	-3.1	-7.8%
18	FUROSEMIDE	64.2	1.0%	-3.1	-4.5%	37.7	0.9%	-3.1	-7.5%
19	METOPROLOL TART	58.4	0.9%	-2.4	-4.0%	30.9	0.7%	-2.6	-7.9%
20	TRAZODONE HCL	56.7	0.9%	3.8	7.1%	39.0	0.9%	1.4	3.8%
TOP 20		2,125.2	33.9%	156.1	7.9%	1,172.3	27.7%	80.5	7.4%

# Comirnaty (Pfizer Covid Vaccine) has highest absolute Rx growth; Osetamivir Phos has greatest loss

Products: Retail Unadjusted Rx's 2021

## Highest Gains

Product	MAT	Abs Growth	YoY Growth
COMIRNATY	127.9	127.6	35,011.0%
MODERNA COVID19 VACC	83.0	82.8	57,025.4%
ALBUTEROL HFA	42.8	6.2	17.0%
ROSUVASTATIN CAL	34.2	4.9	16.5%
FAMOTIDINE	19.4	4.7	32.1%
VIT D2	19.0	4.2	28.5%
AMOXICILLIN	42.9	3.6	9.2%
ONDANSETRON ODT	14.8	2.7	22.6%
ESCITALOPRAM OXAL	38.8	2.7	7.4%
ELIQUIS	18.5	2.4	14.6%

## Highest Losses

Product	MAT	Abs Growth	YoY Growth
OSELTAMIVIR PHOS	1.1	-7.3	-86.6%
AFLURIA QUAD	3.0	-3.7	-55.4%
FLUCELVAX QUADVAL	6.5	-3.7	-36.6%
HYDROCHLOROTHIAZIDE	38.9	-3.7	-8.7%
LEVOTHYROXINE SOD	69.0	-3.6	-5.0%
LISINOPRIL	74.7	-3.6	-4.6%
SIMVASTATIN	24.9	-3.5	-12.4%
VENTOLIN HFA	4.7	-3.3	-41.6%
MONTELUKAST SOD	32.5	-2.7	-7.8%
ERGOCALCIFEROL	5.6	-2.4	-29.9%

Rx's are adjusted and are shown in Millions; Growth is based on Absolute Growth 2021

# Retail Class of Trade and Method of Payment Performance

# Pharmacy closings and M&A continue in the headlines

## Pharmacies Closing



- Rite Aid closing 60+ stores<sup>1</sup>
- CVS closing 900 stores over 3 years<sup>2</sup>
- Walgreens closing stores due to theft<sup>3</sup>
- Stop & Shop closing 19 in-store pharmacies<sup>4</sup>
- Intermountain closing 25 retail pharmacies<sup>5</sup>
- Wakefern closing 62 ShopRite pharmacies<sup>6</sup>



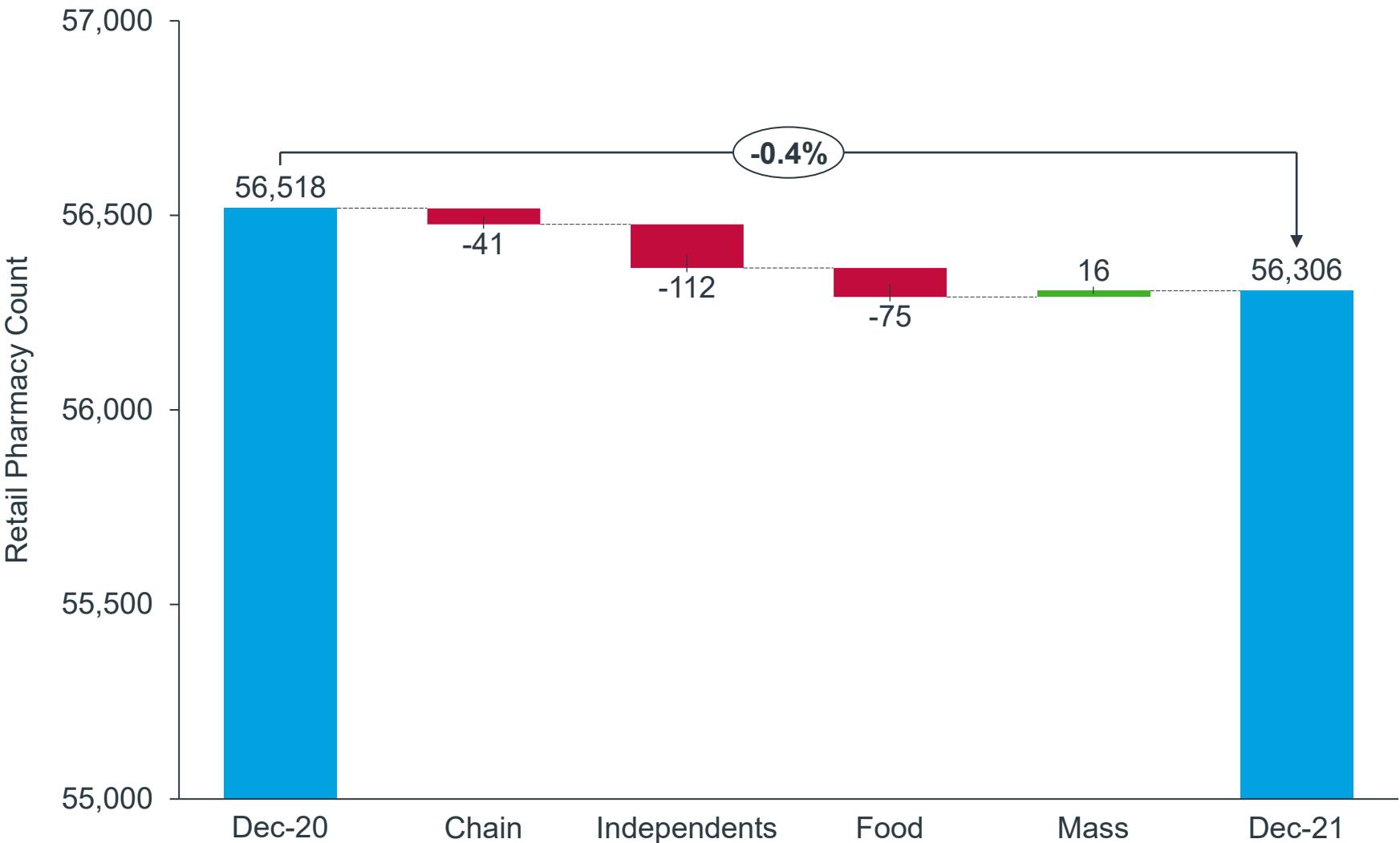
## Mergers & Acquisitions



- Price Chopper and Tops Markets merged<sup>7</sup>
- Brookshire Grocery acquired Reasors<sup>8</sup>
- Raley's acquired Bashas'<sup>9</sup>
- BiMart sells pharmacy business to Walgreens<sup>10</sup>
- BioMatrix acquires Infucare<sup>11</sup>
- Ro's acquires Modern Fertility<sup>12</sup>
- TDS acquired by Private Equity Firm<sup>13</sup>
- Optum acquires Change Healthcare<sup>14</sup>
- Centene acquired Magellan Health<sup>15</sup>
- Rite Aid purchased Bartells<sup>16</sup>
- Centene acquires Pantherx<sup>17</sup>

*See appendix for links to these headlines*

# Retail store counts remain relatively flat year over year

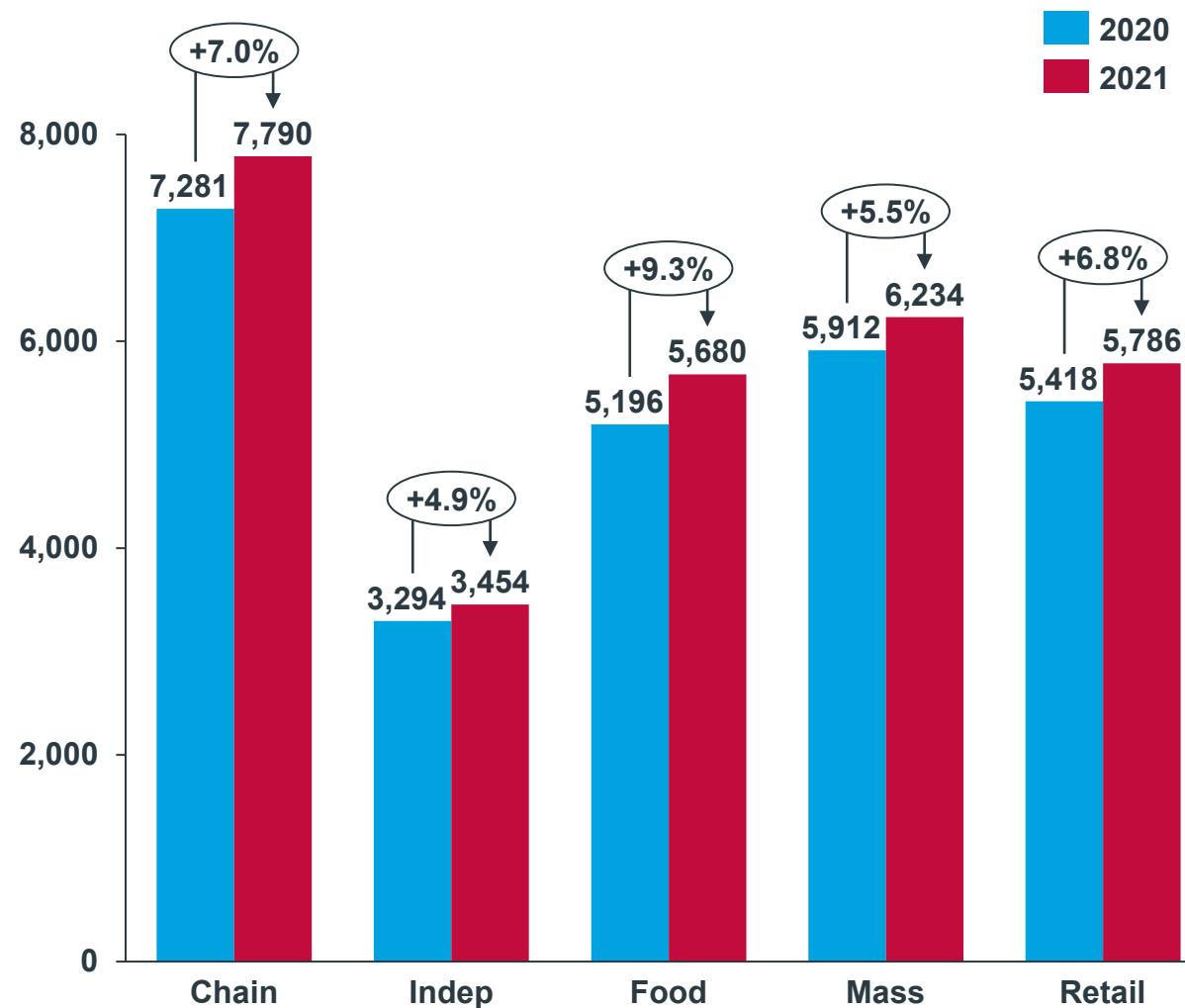


Data Source: IQVIA Rx Store Universe

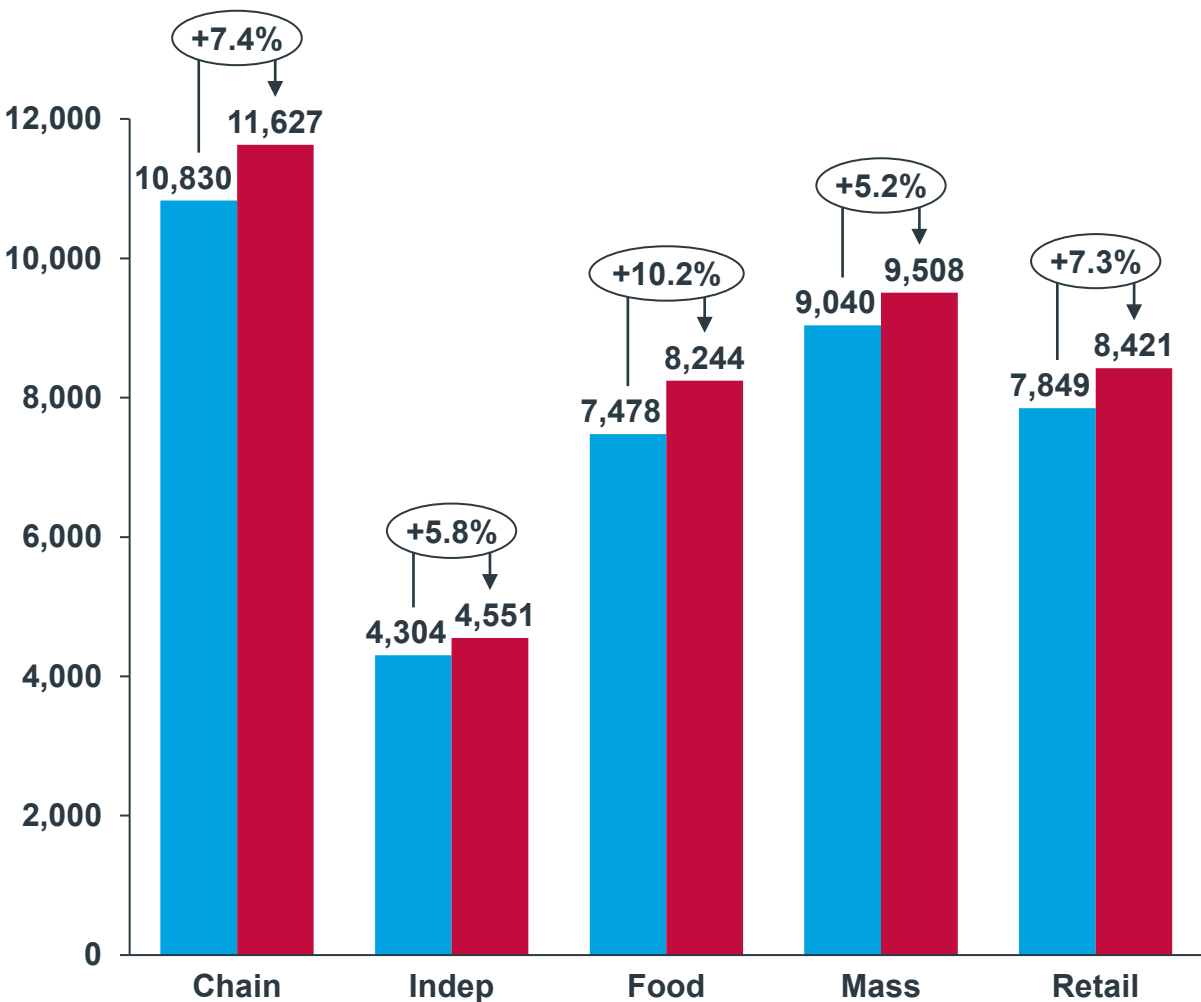


# While the number of stores has decreased slightly, the performance of all stores has increased

Avg. Unadj. Rx's per Store per Month

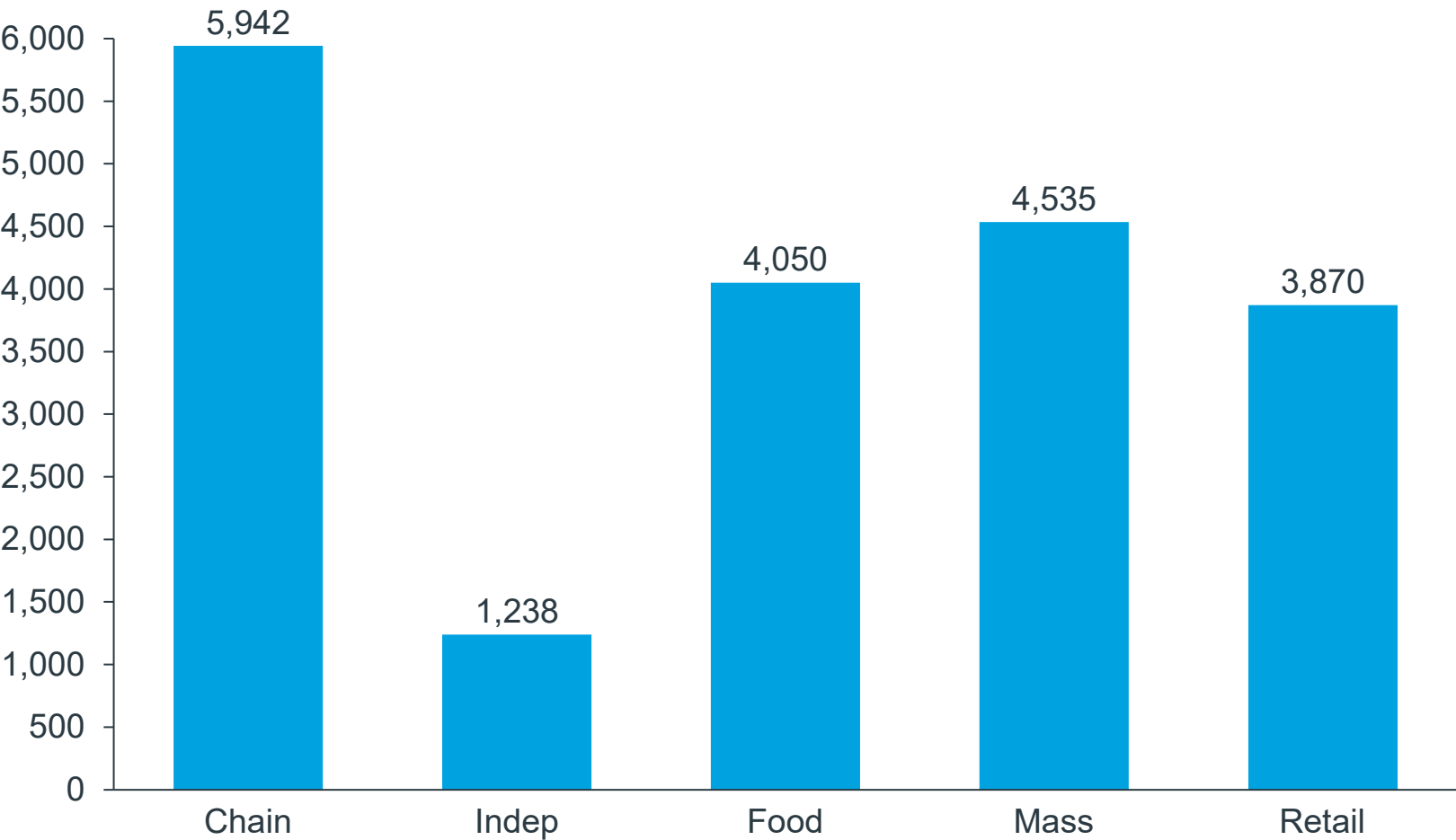


Avg. Adj. Rx's per Store per Month

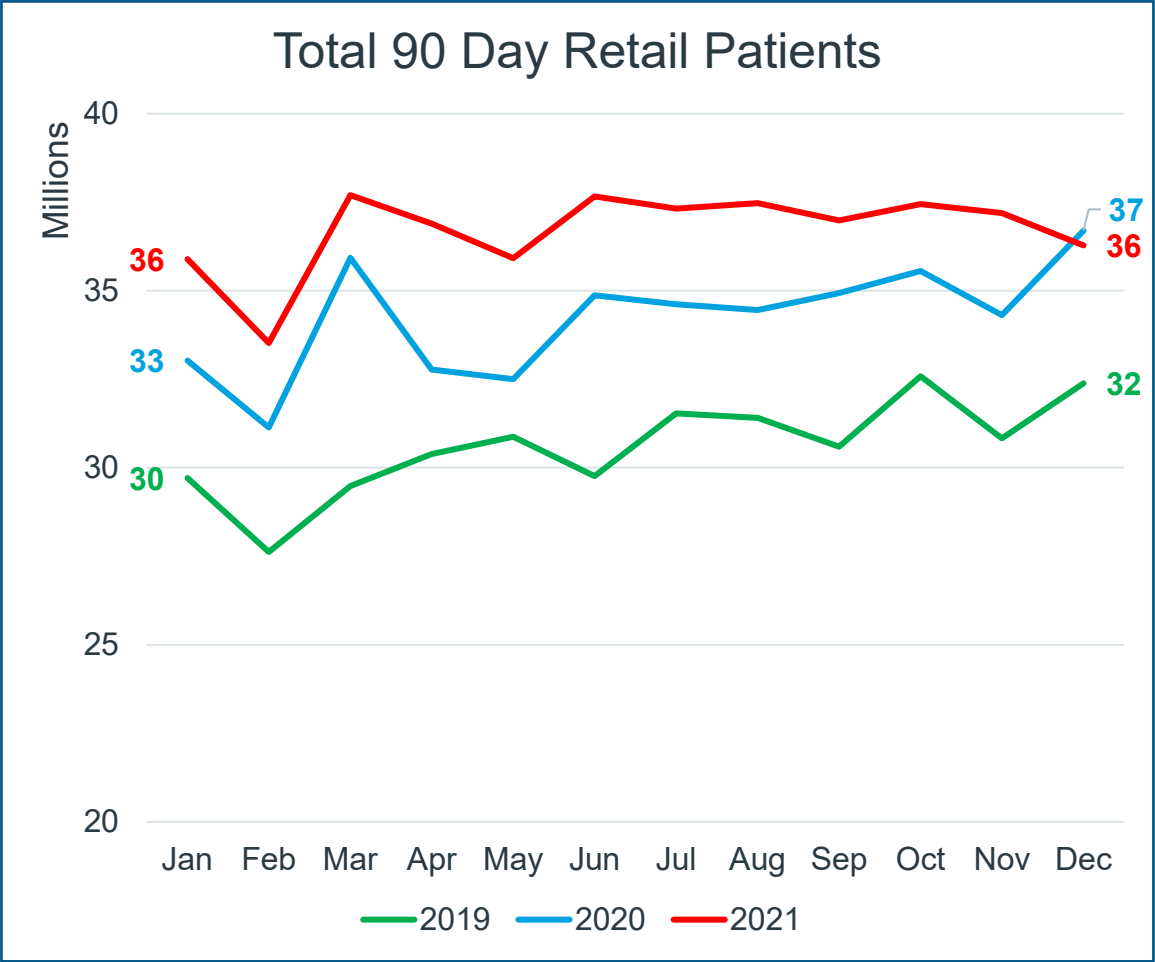
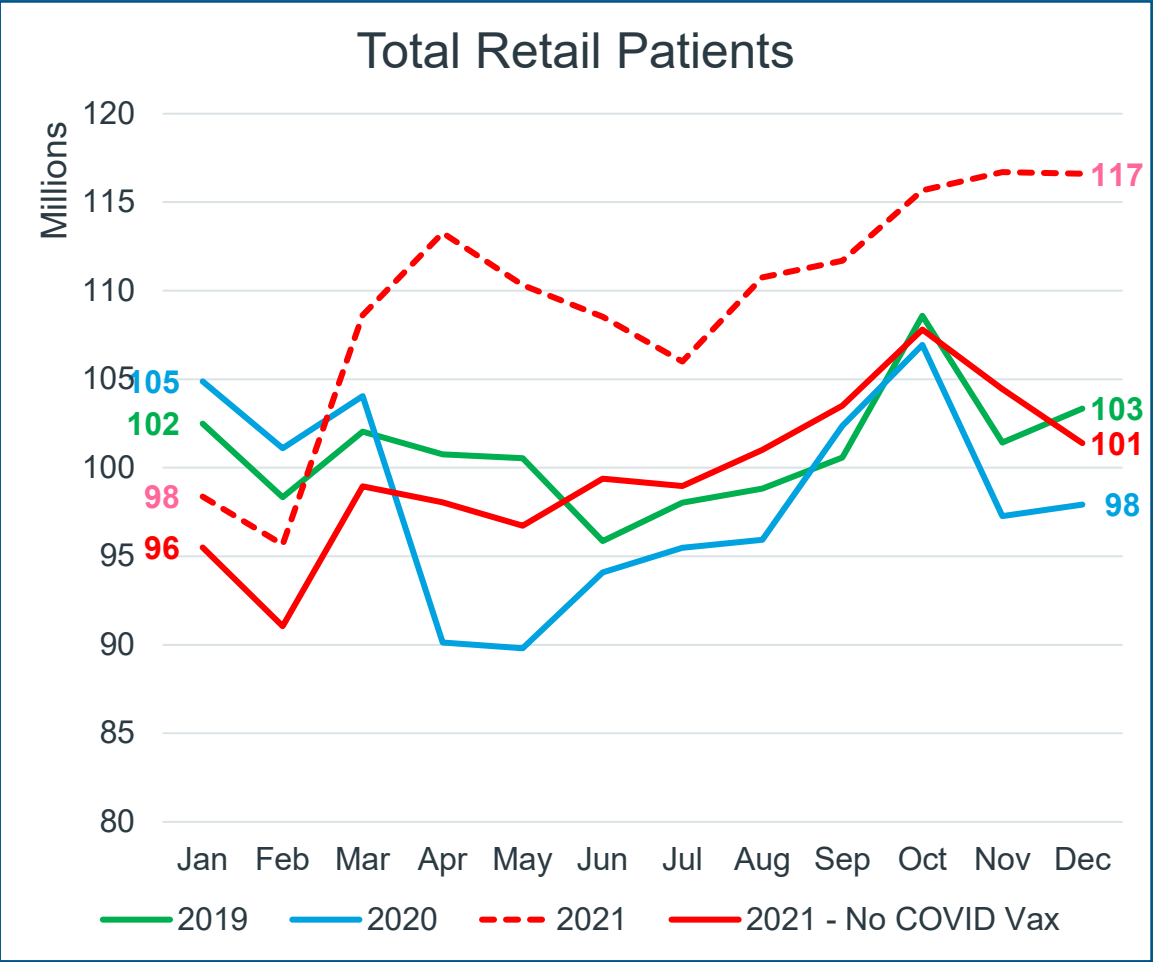


# In 2021 Retail pharmacies administered almost 3,900 COVID-19 vaccines per store

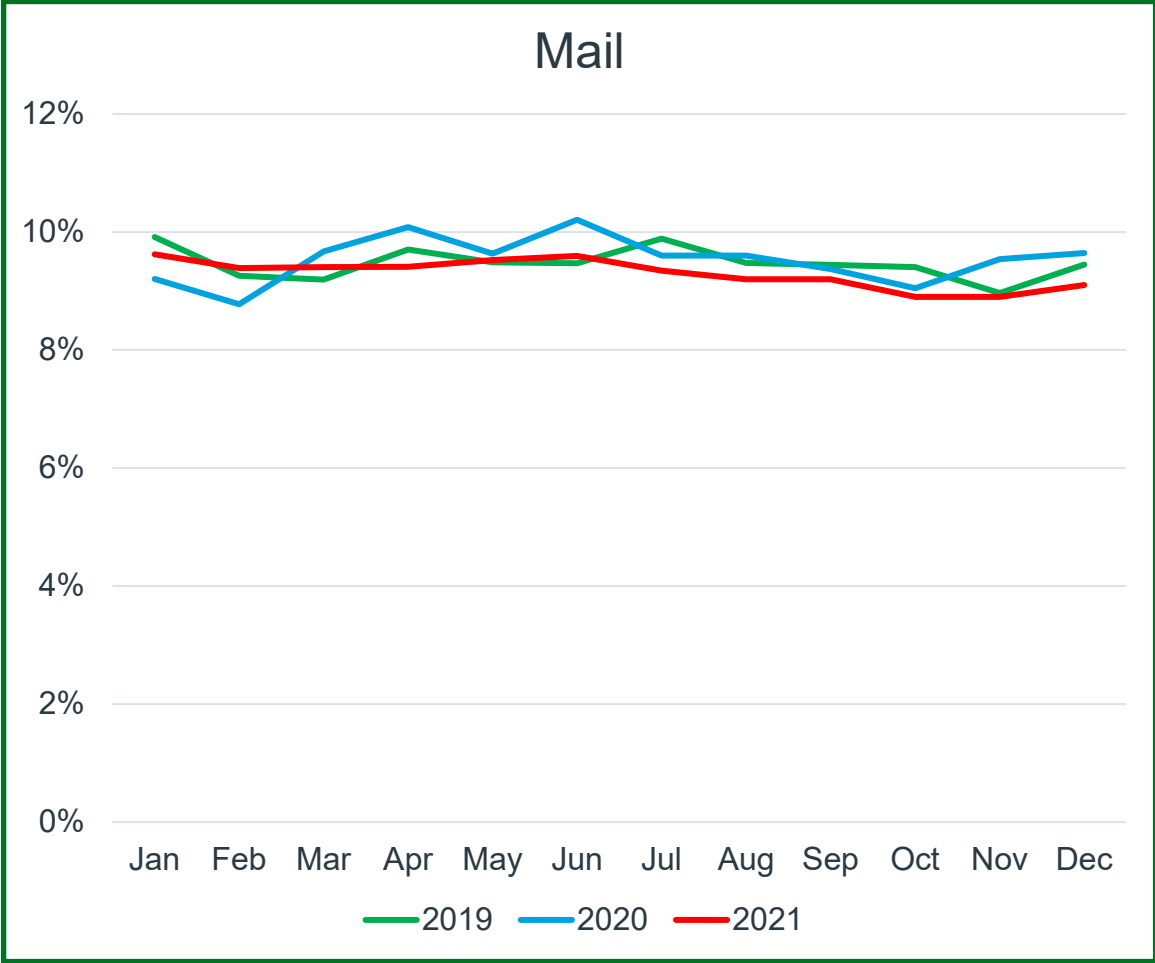
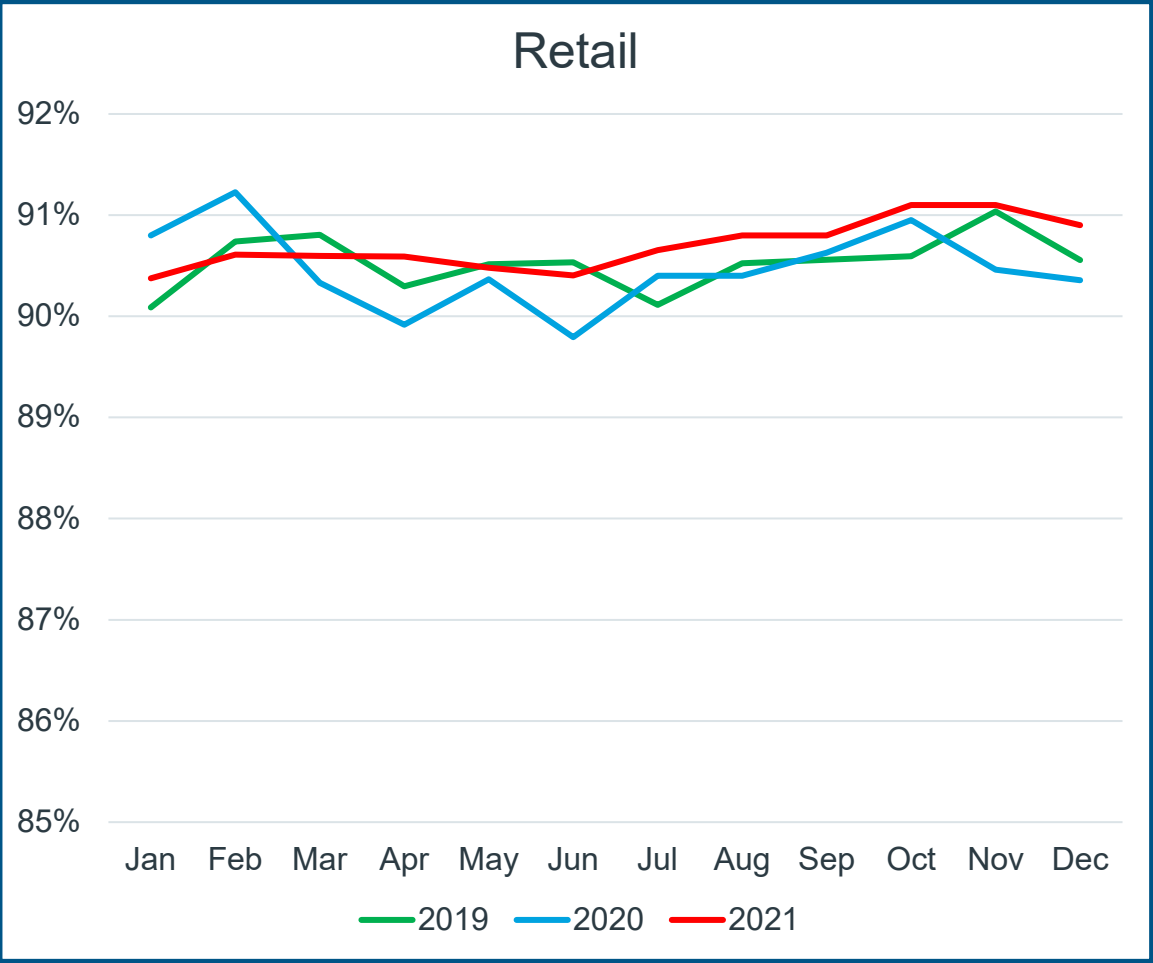
COVID-19 VACCINES PER STORE IN 2021



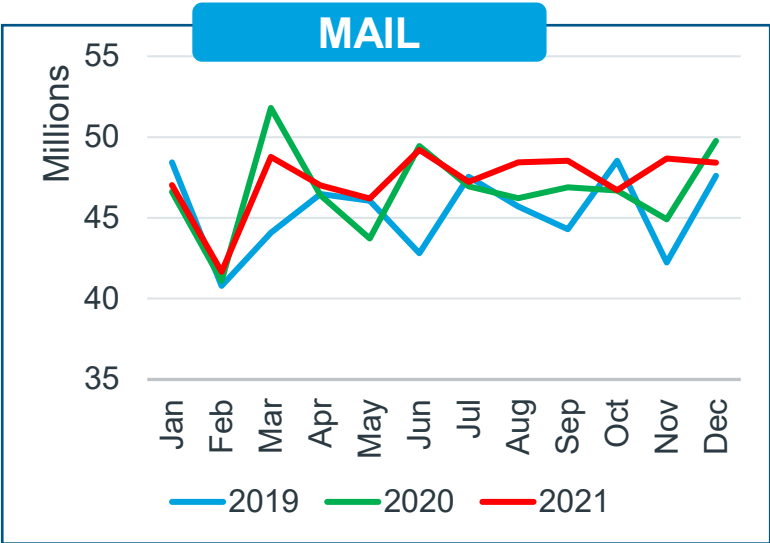
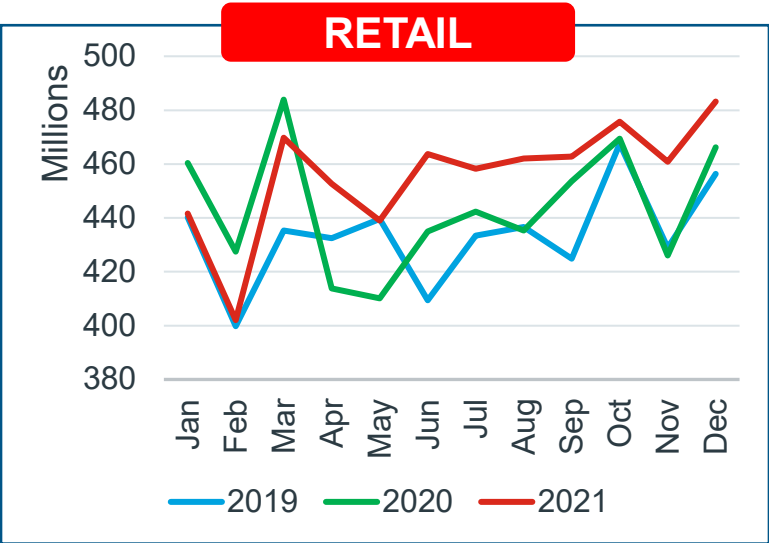
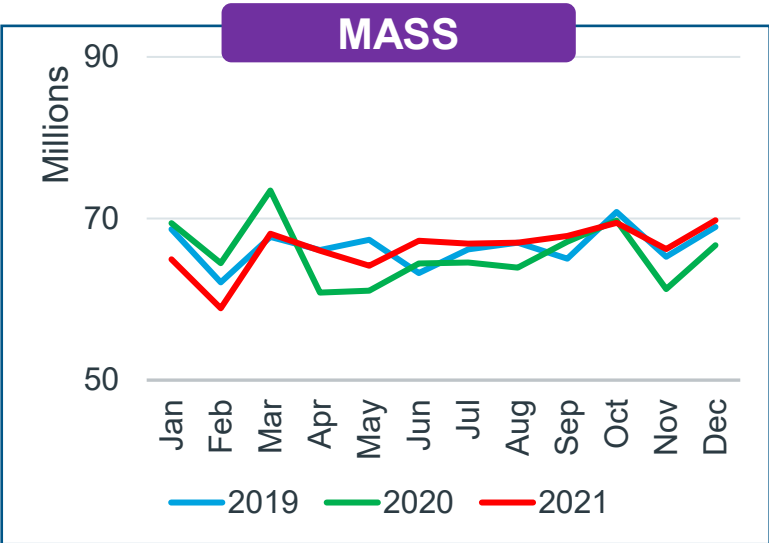
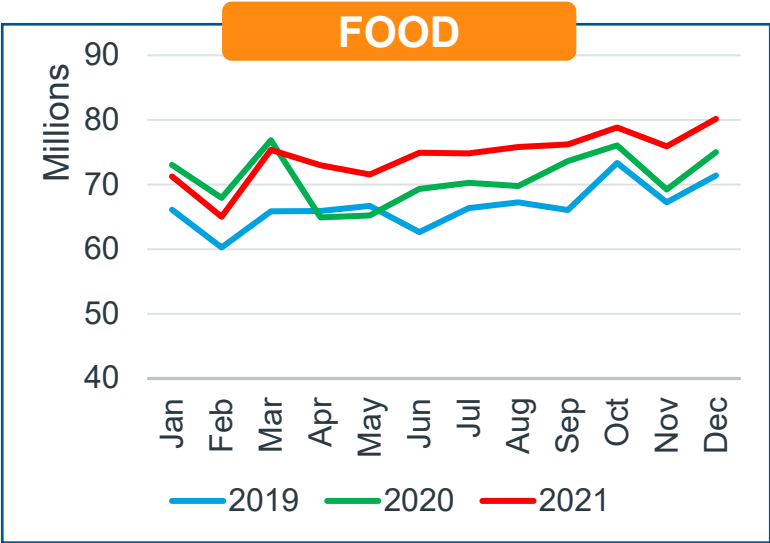
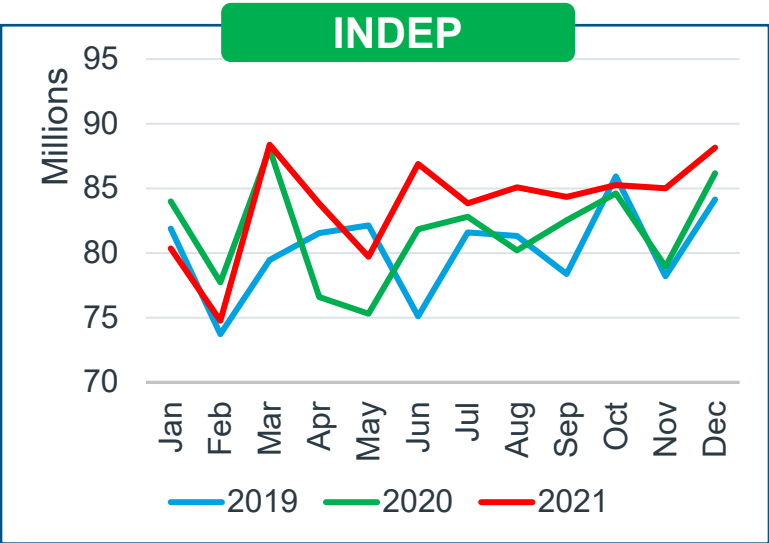
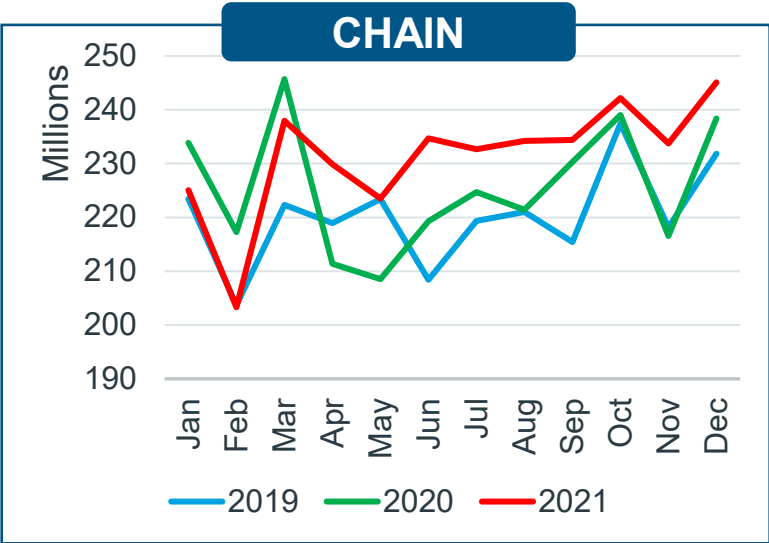
# In 2021, there was not a huge increase in patient counts at Retail



# After seeing increases in 2020 Mail lost share throughout much of 2021



# With the exception of Mass most saw increases in 2021 volumes



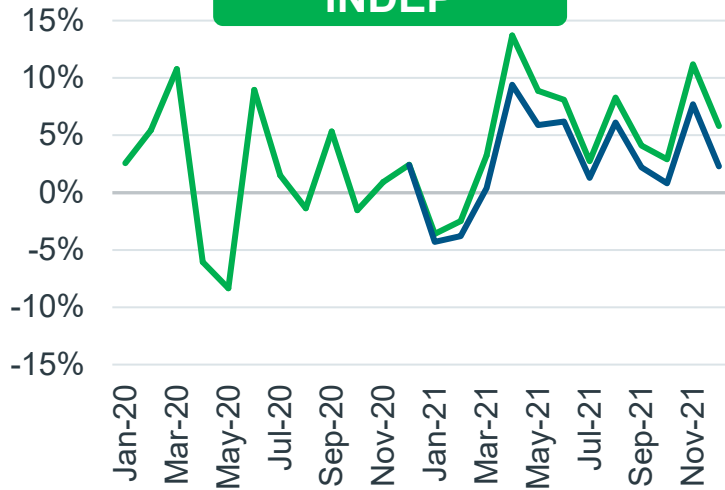
# With and without COVID vaccines, growth trends held positive throughout 2021

ADJUSTED RX GROWTH

CHAIN



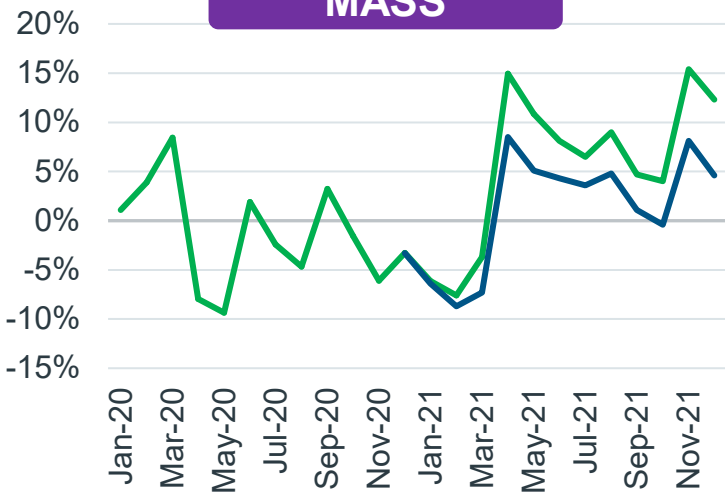
INDEP



FOOD



MASS



RETAIL

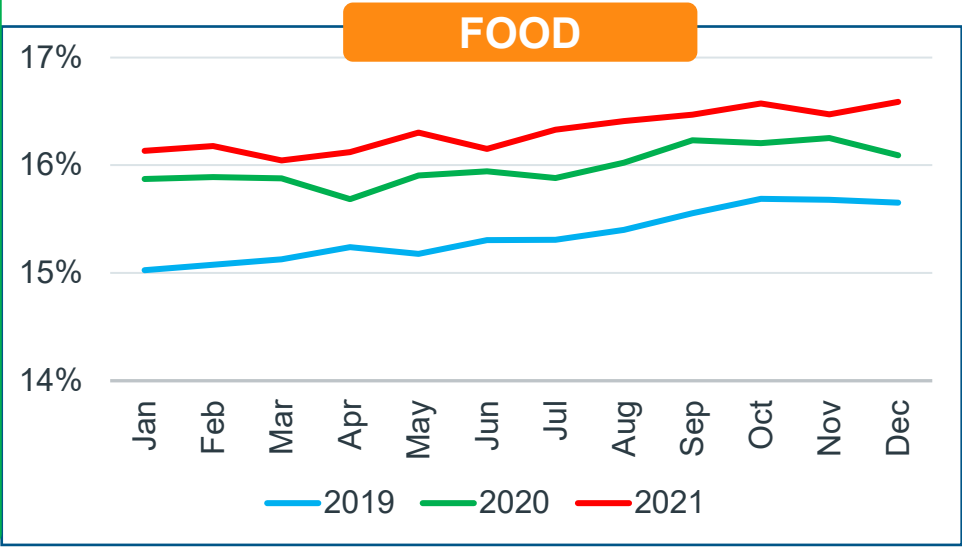
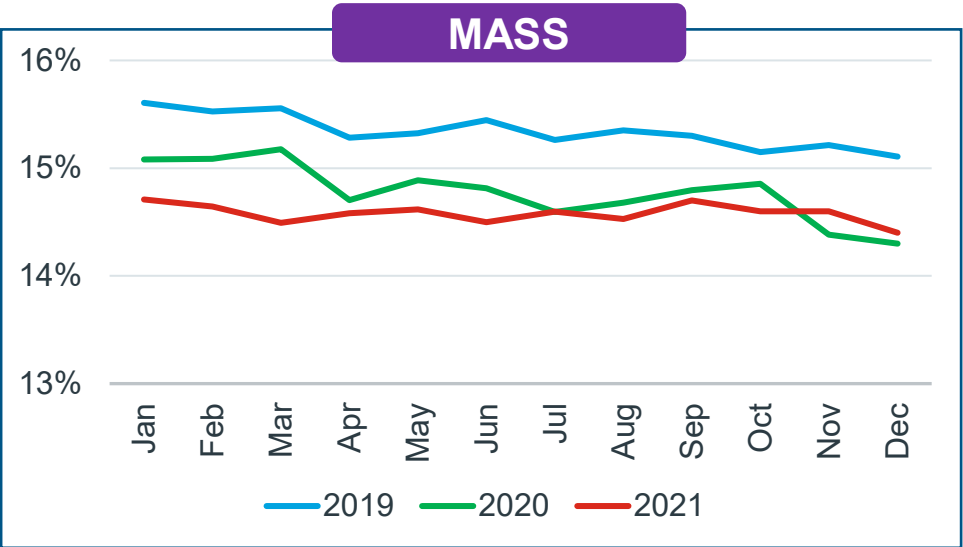
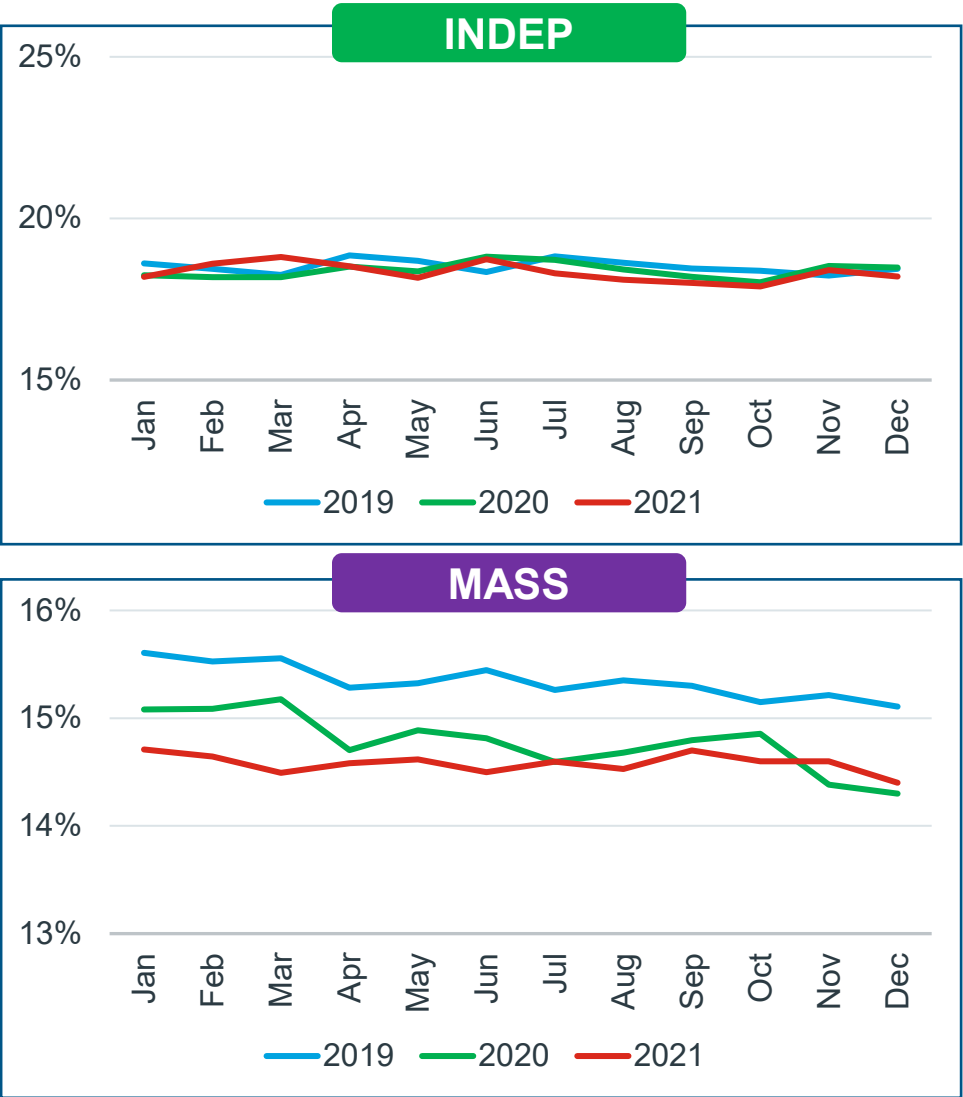
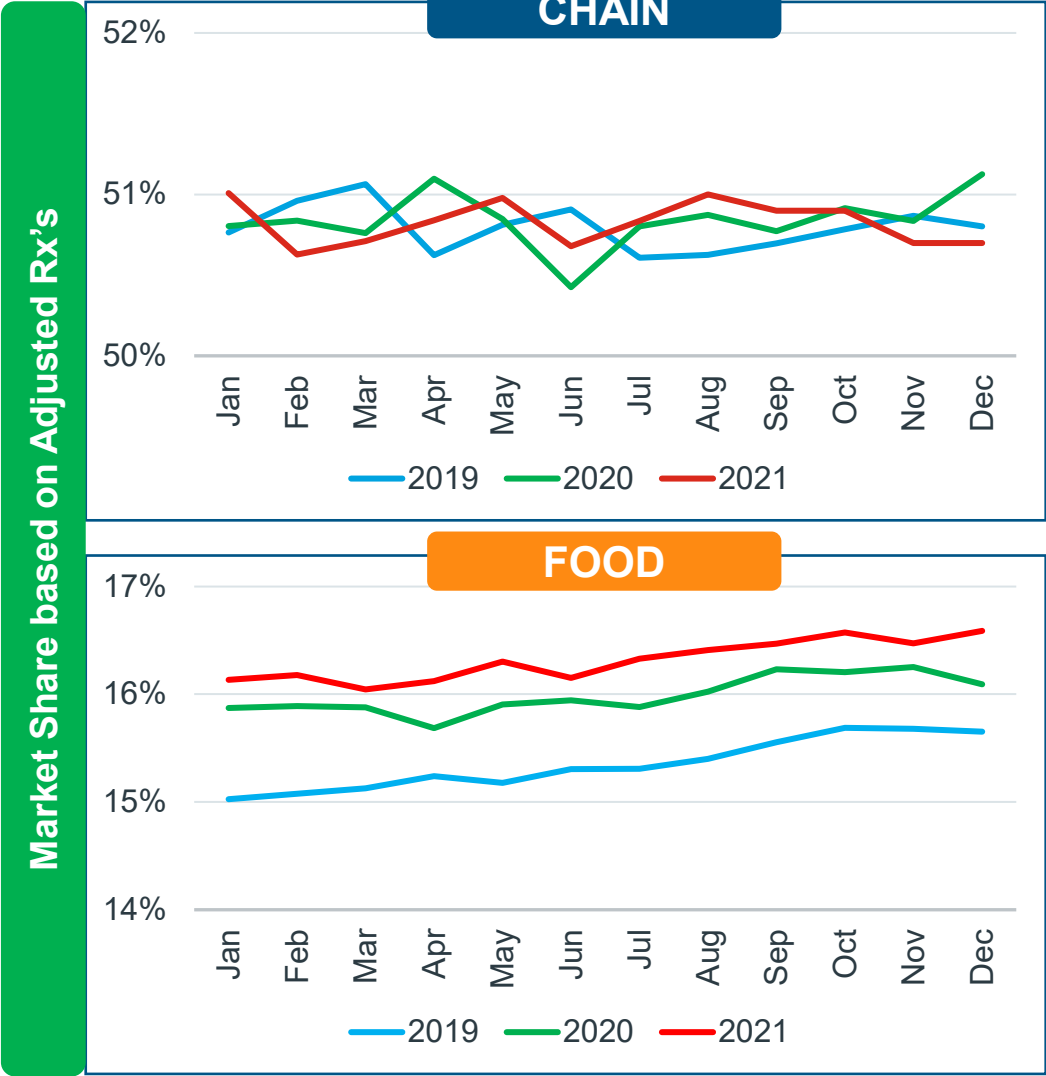


MAIL



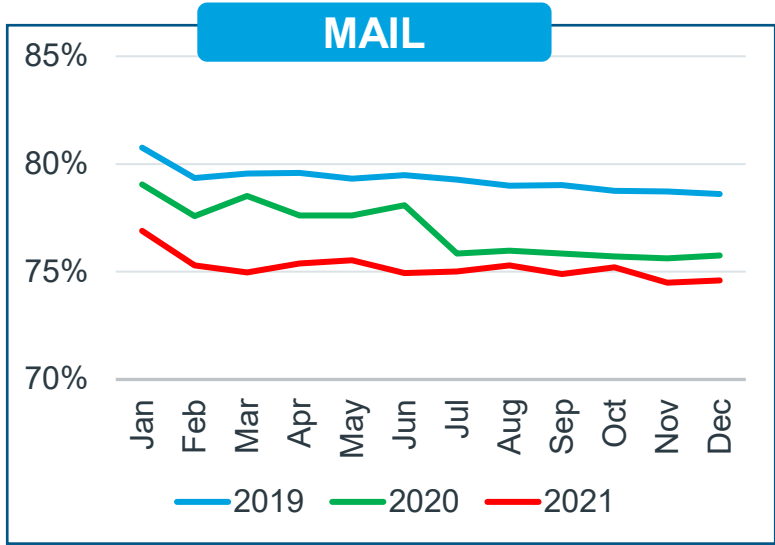
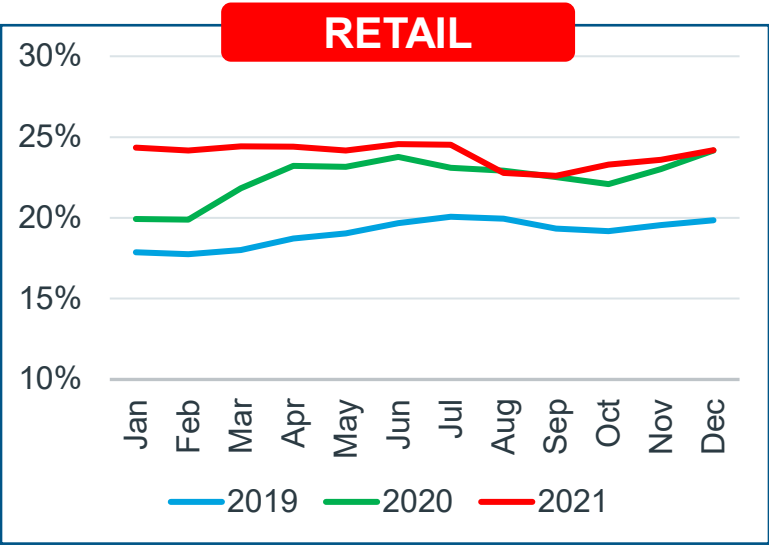
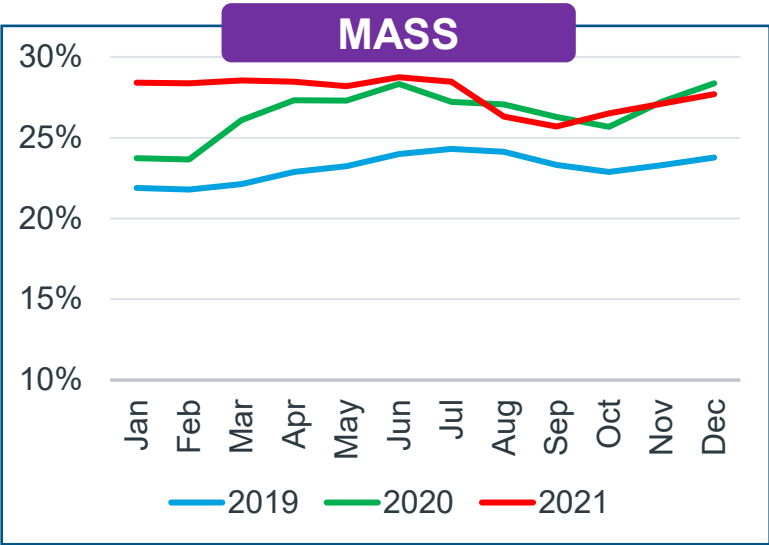
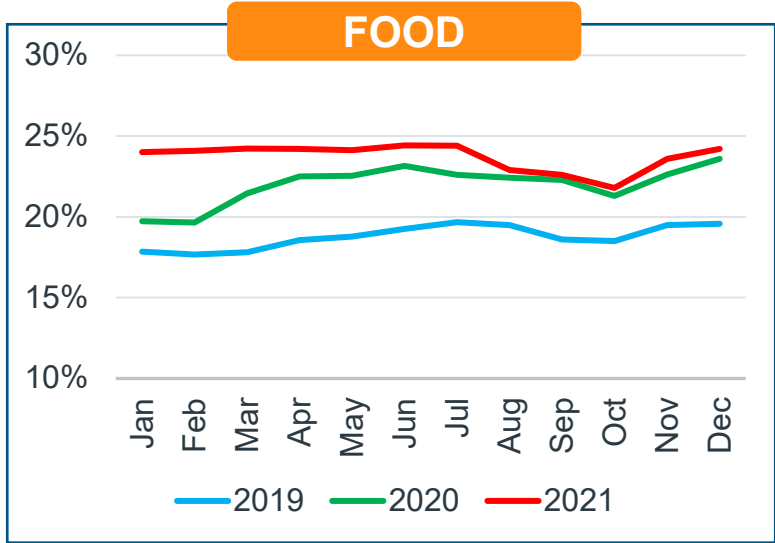
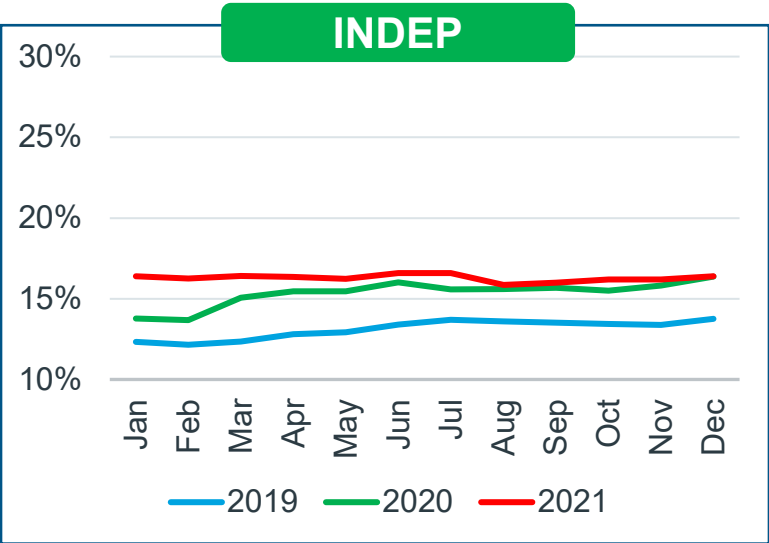
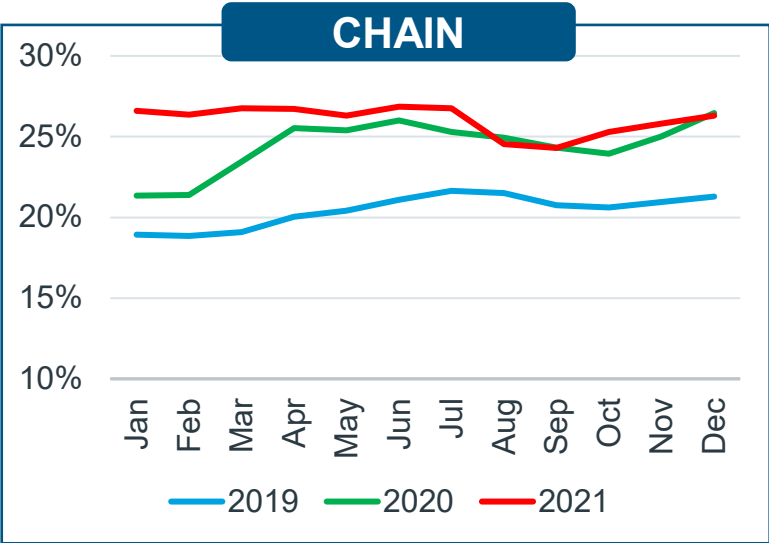
Excludes COVID Vaccines

# Food continues to see share grow on a year over year basis



# 90 Day Rx's as a percent of total Retail is slowing

90 Day Percentage based on Unadj. Rx's

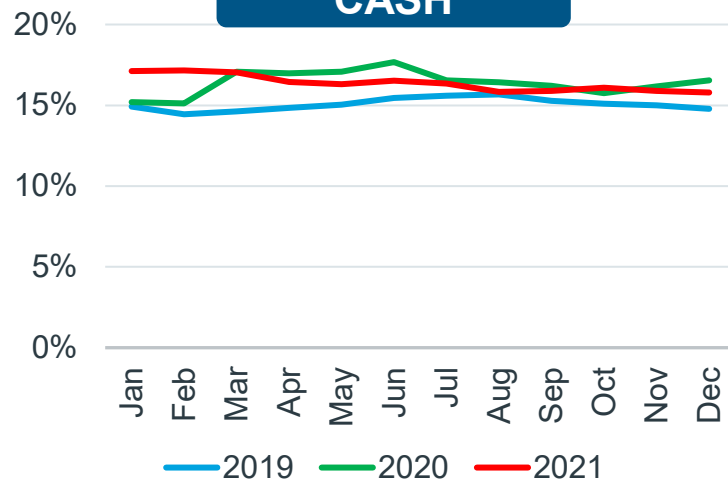




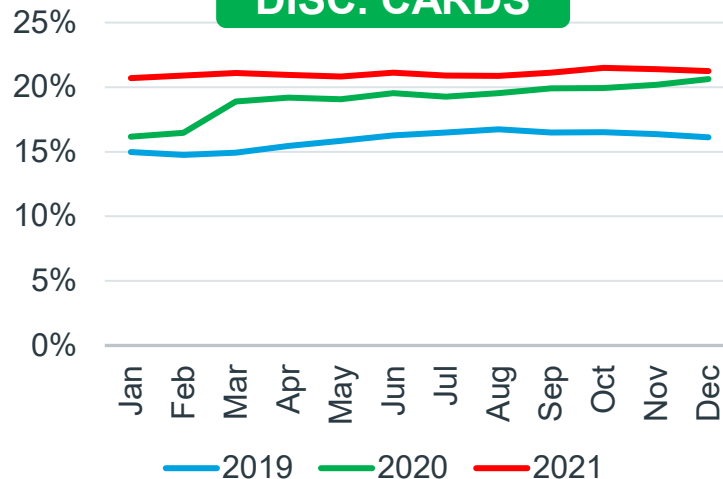
# 90 Day Rx's across the Methods of Payment have also leveled off

90-Day % based on Unadjusted Rx's

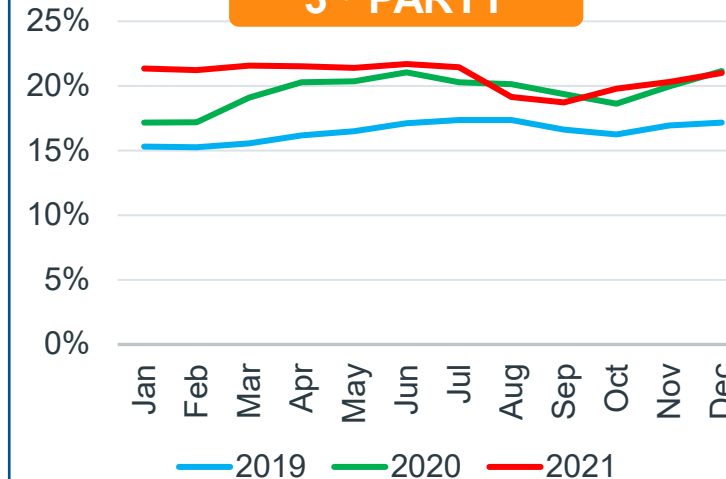
## CASH



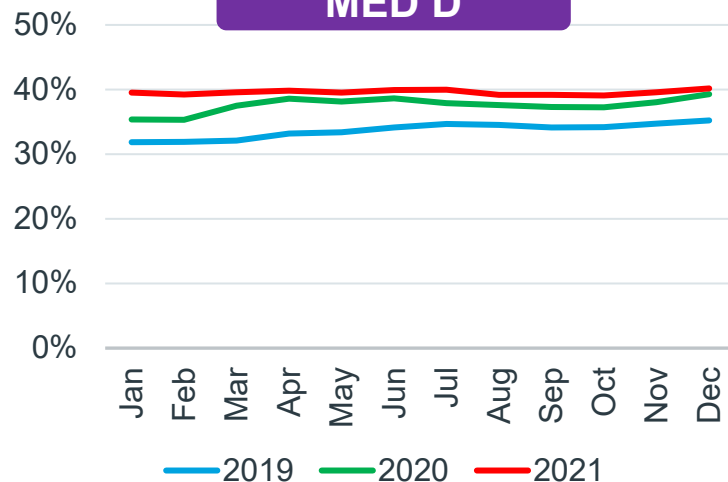
## DISC. CARDS



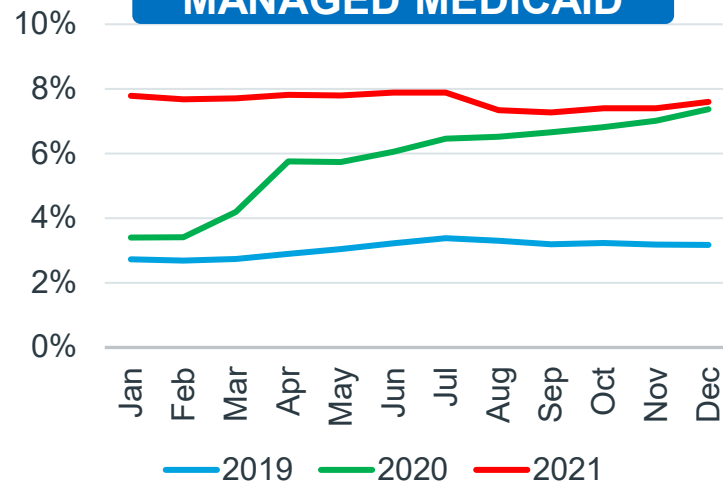
## 3<sup>rd</sup> PARTY



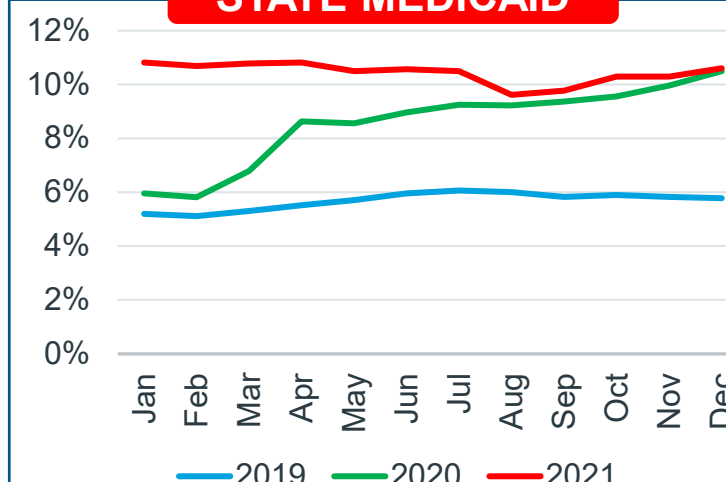
## MED D



## MANAGED MEDICAID



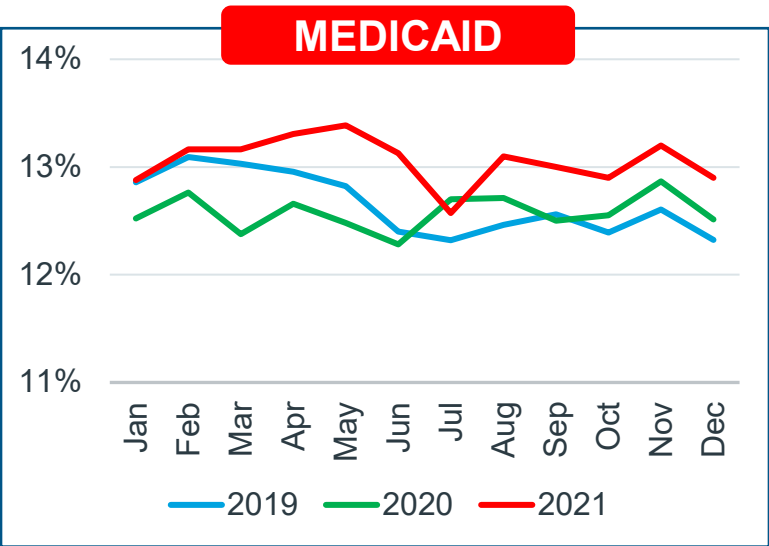
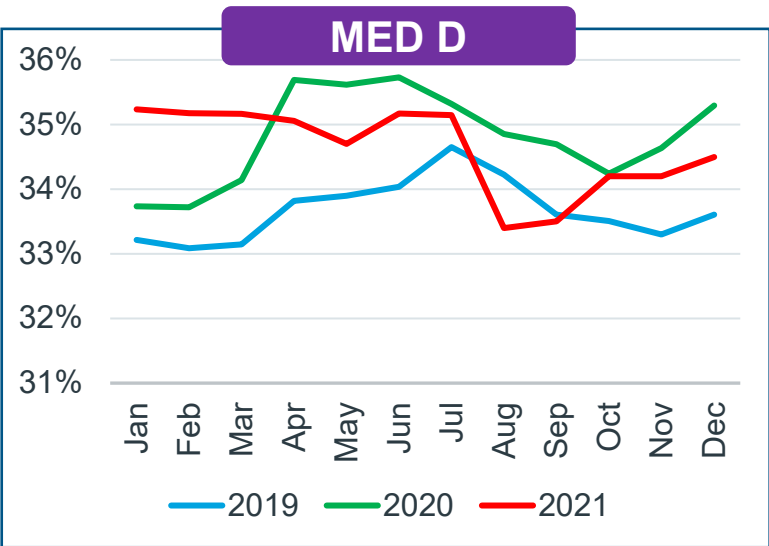
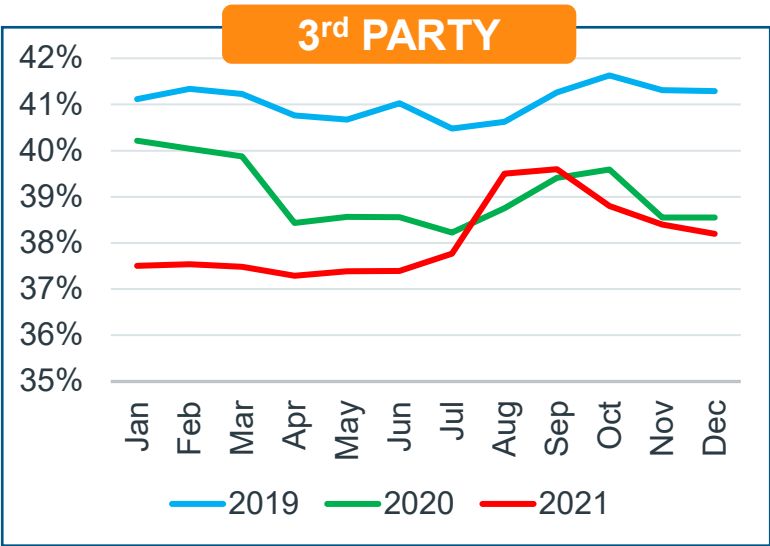
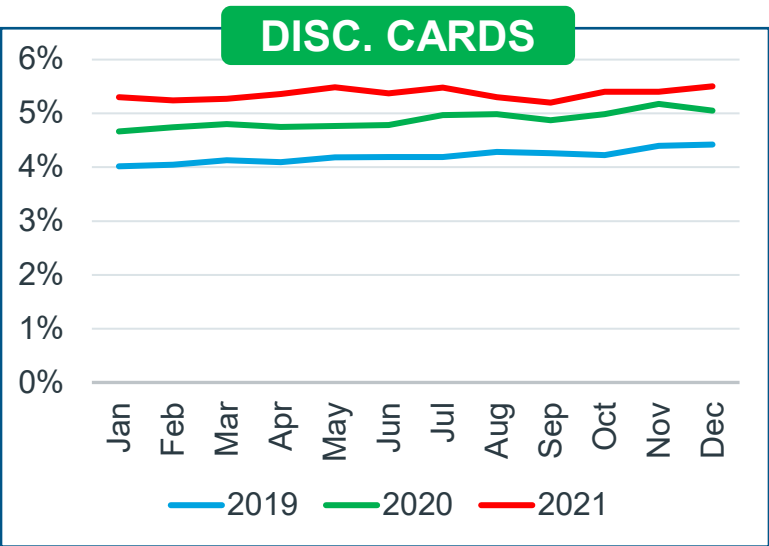
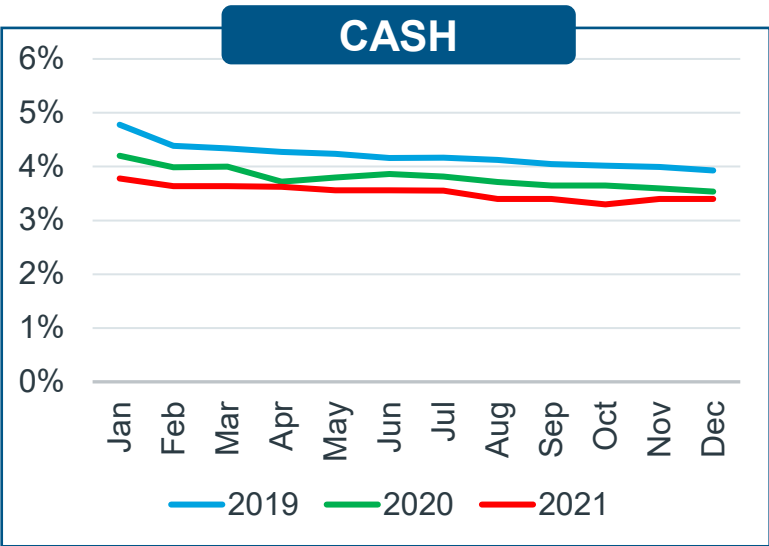
## STATE MEDICAID



Excludes COVID Vaccines

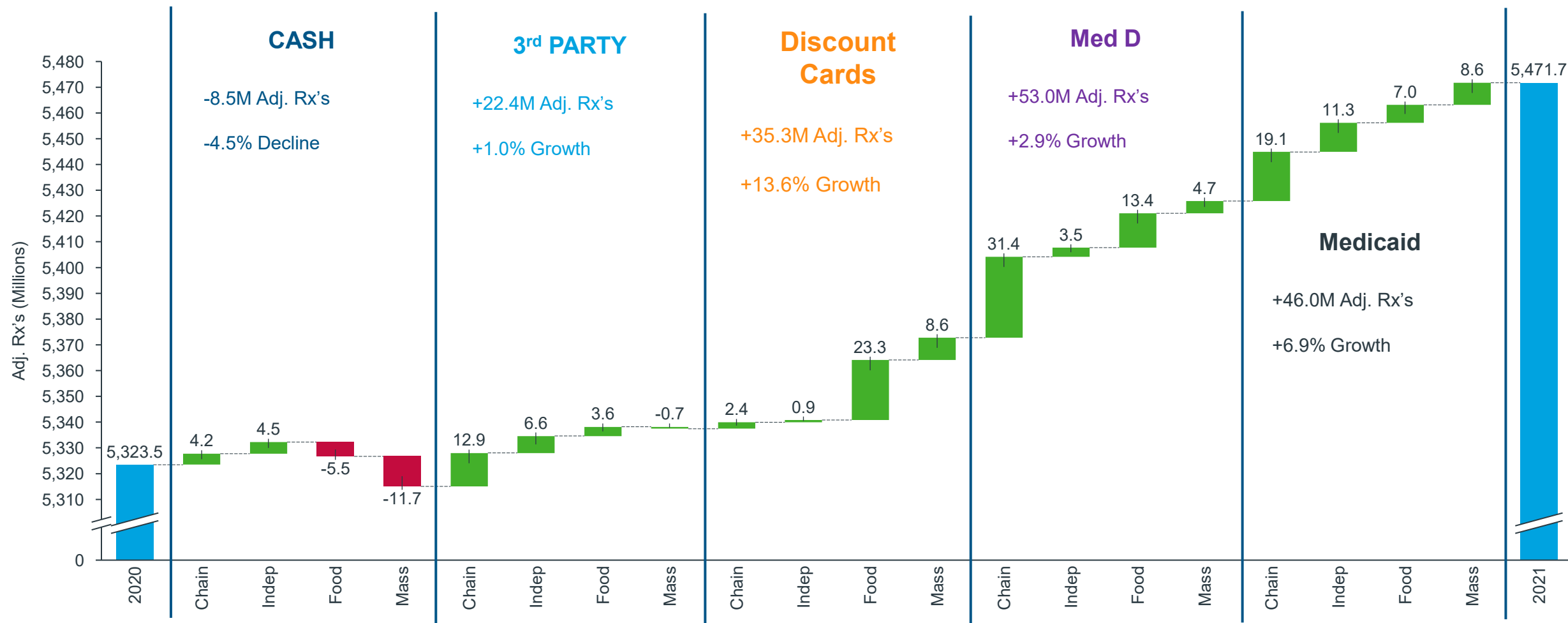
# Discount Cards and Medicaid have shown YoY share gains

Market Share based on Adjusted Rx's



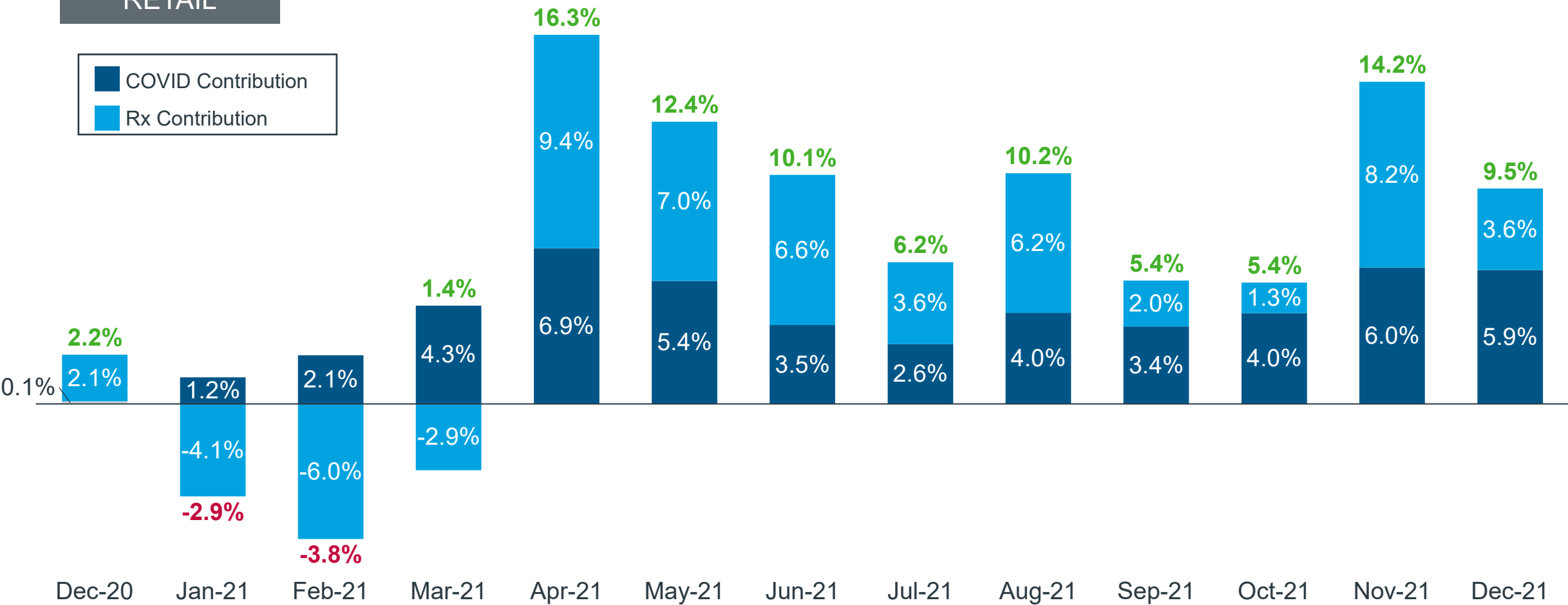
NOTE: Discount Cards are removed from 3rd Party

# Market growth was largely driven by Med D and Medicaid



# COVID Vaccines have been a large contributor to growth throughout the year

RETAIL

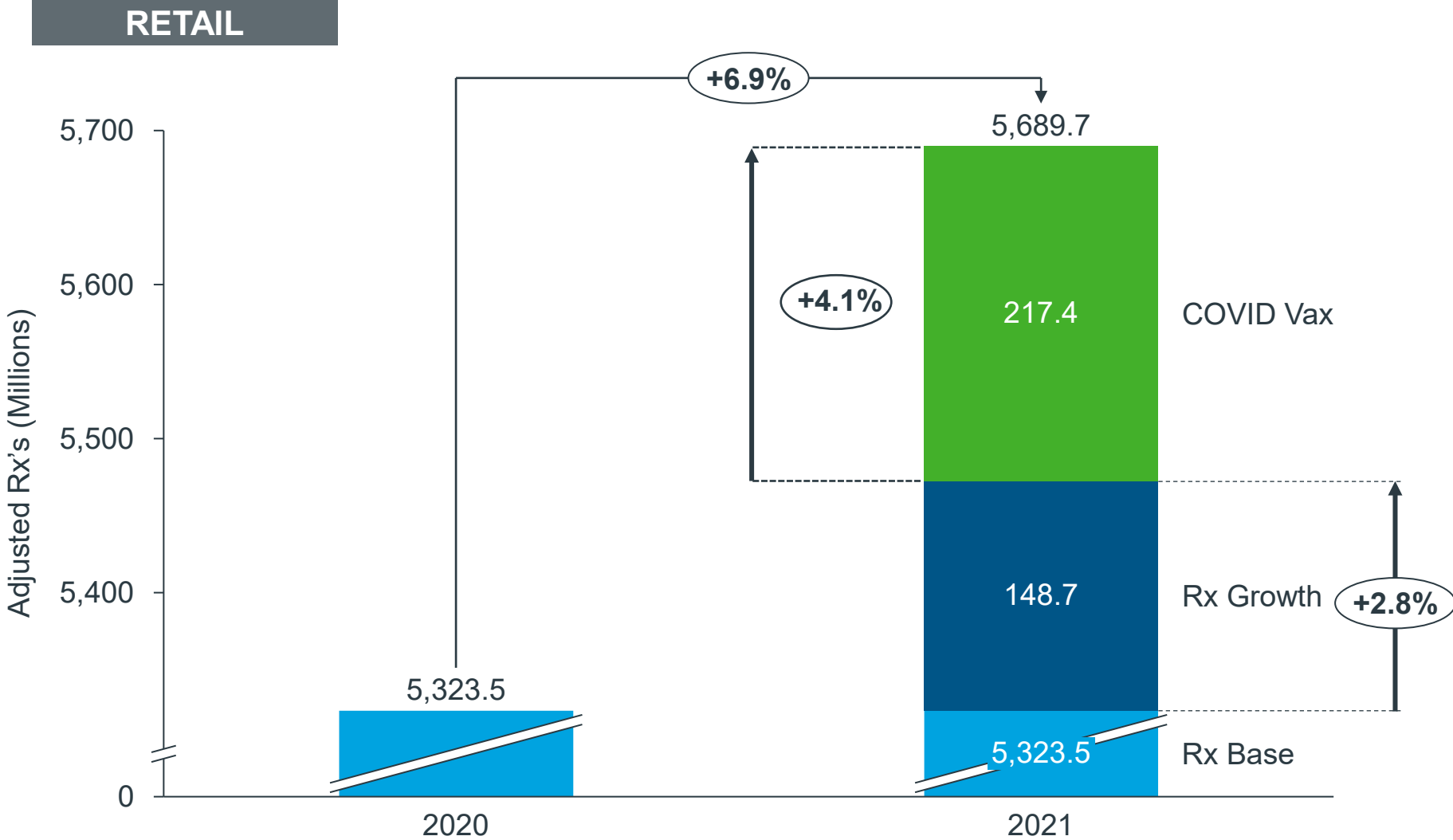


Data is based on Adjusted Rx's

# COVID Vaccines contributions to growth can be seen within each class of trade

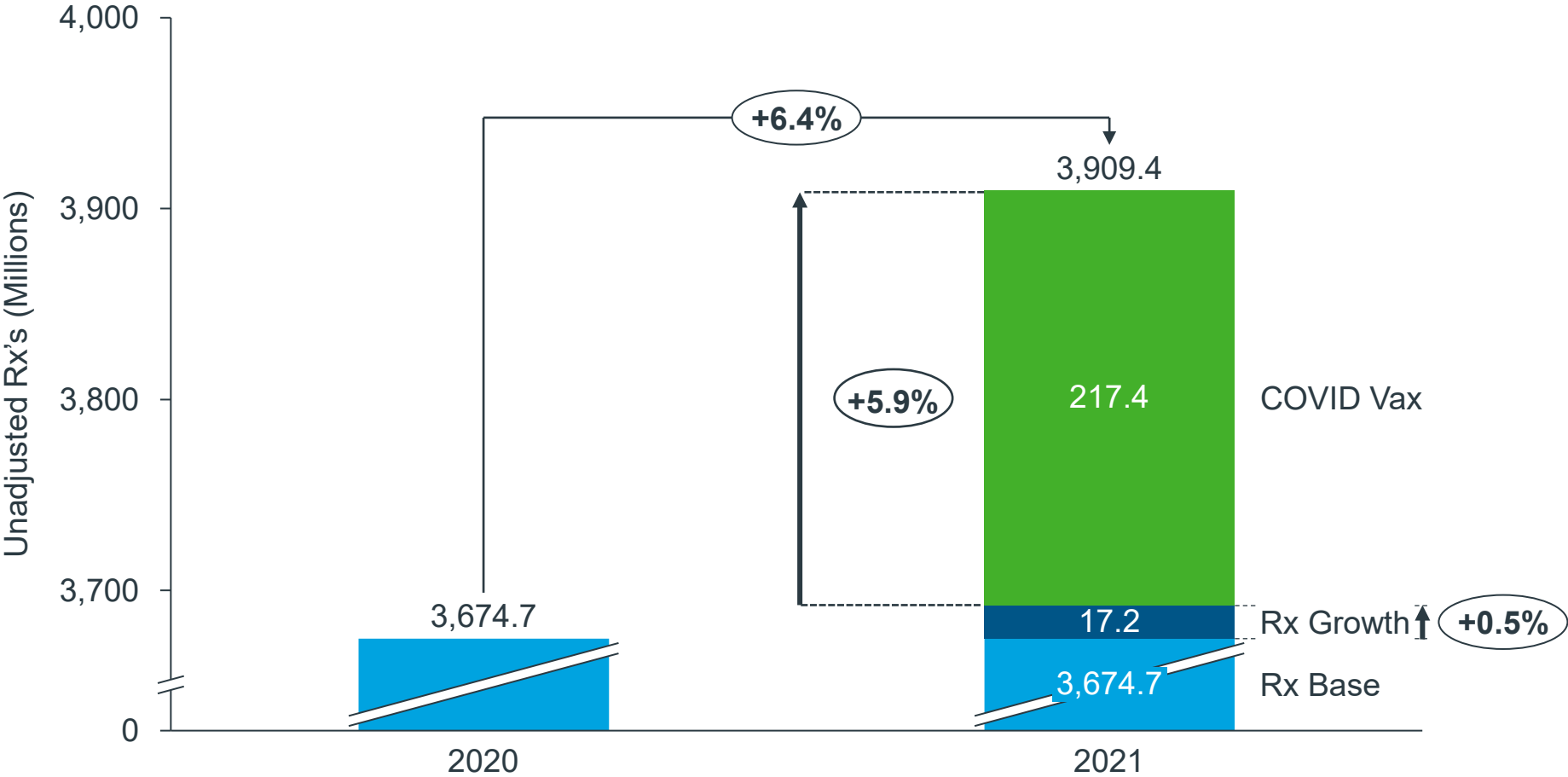


# Almost 60% of the growth seen in Retail in 2021 came from COVID vaccines



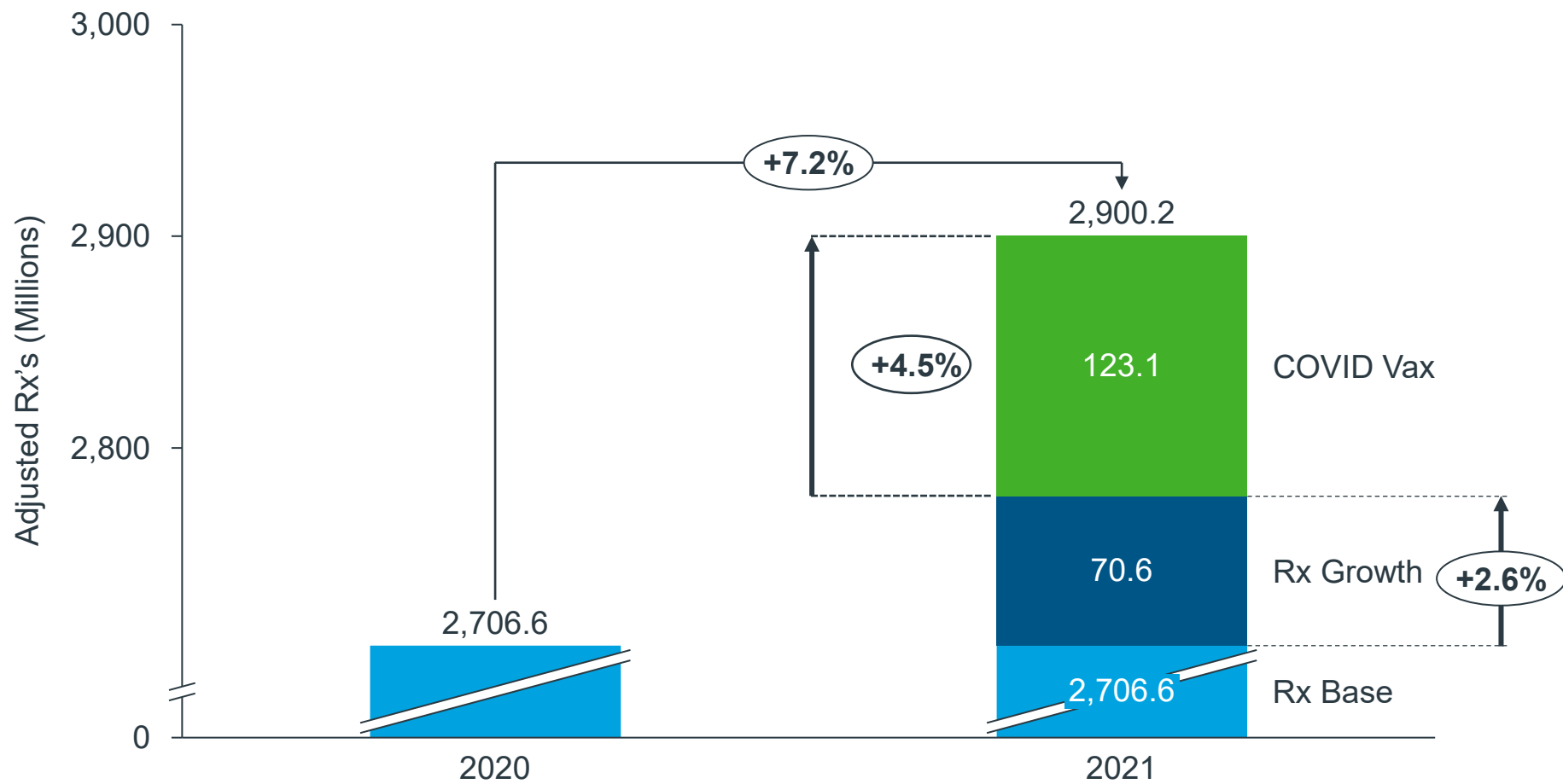
# On an unadjusted basis Retail growth was flat without COVID Vaccines

## RETAIL - UNADJUSTED



# Chain's growth was driven strongly by COVID vaccines

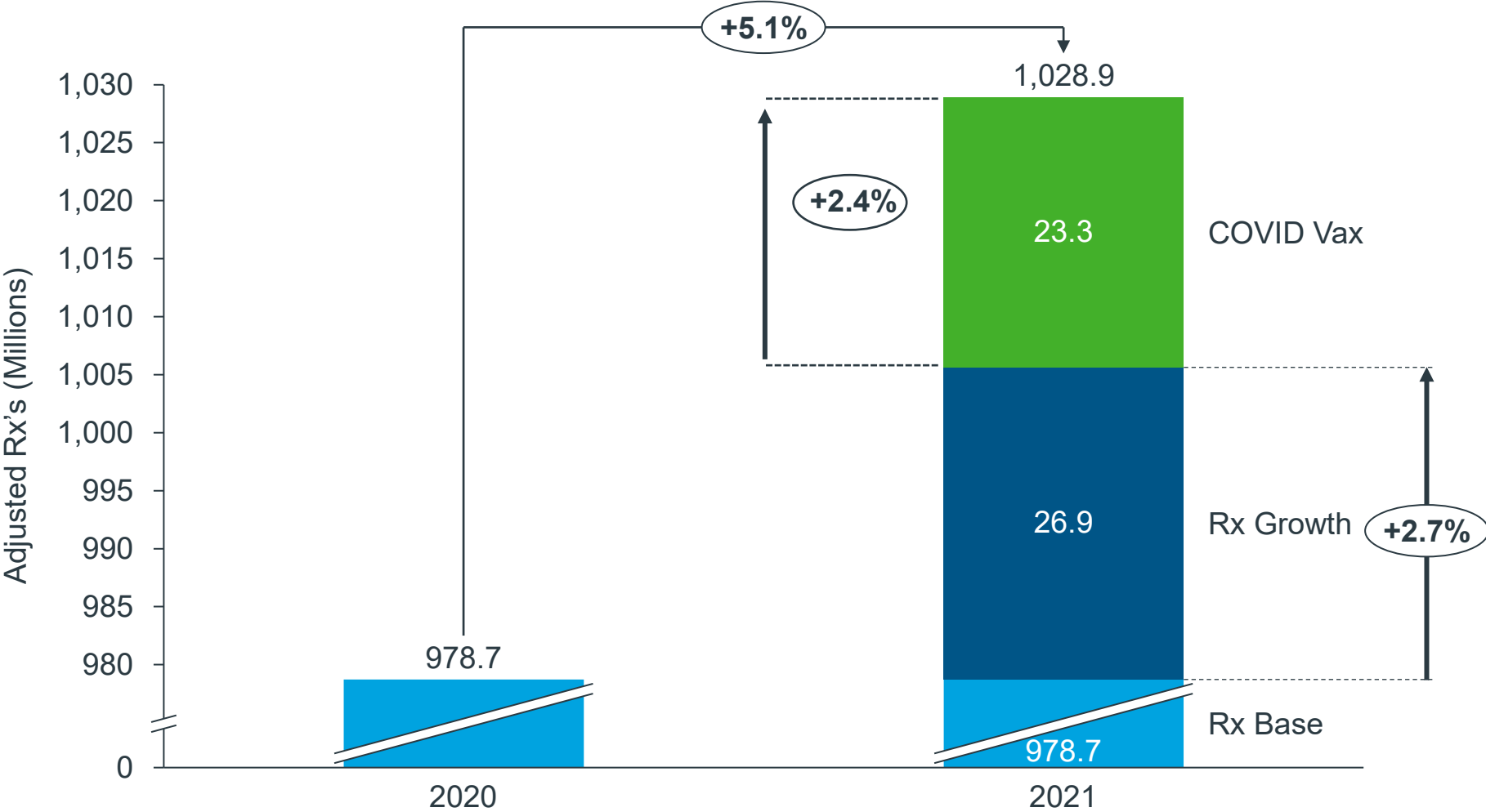
CHAIN





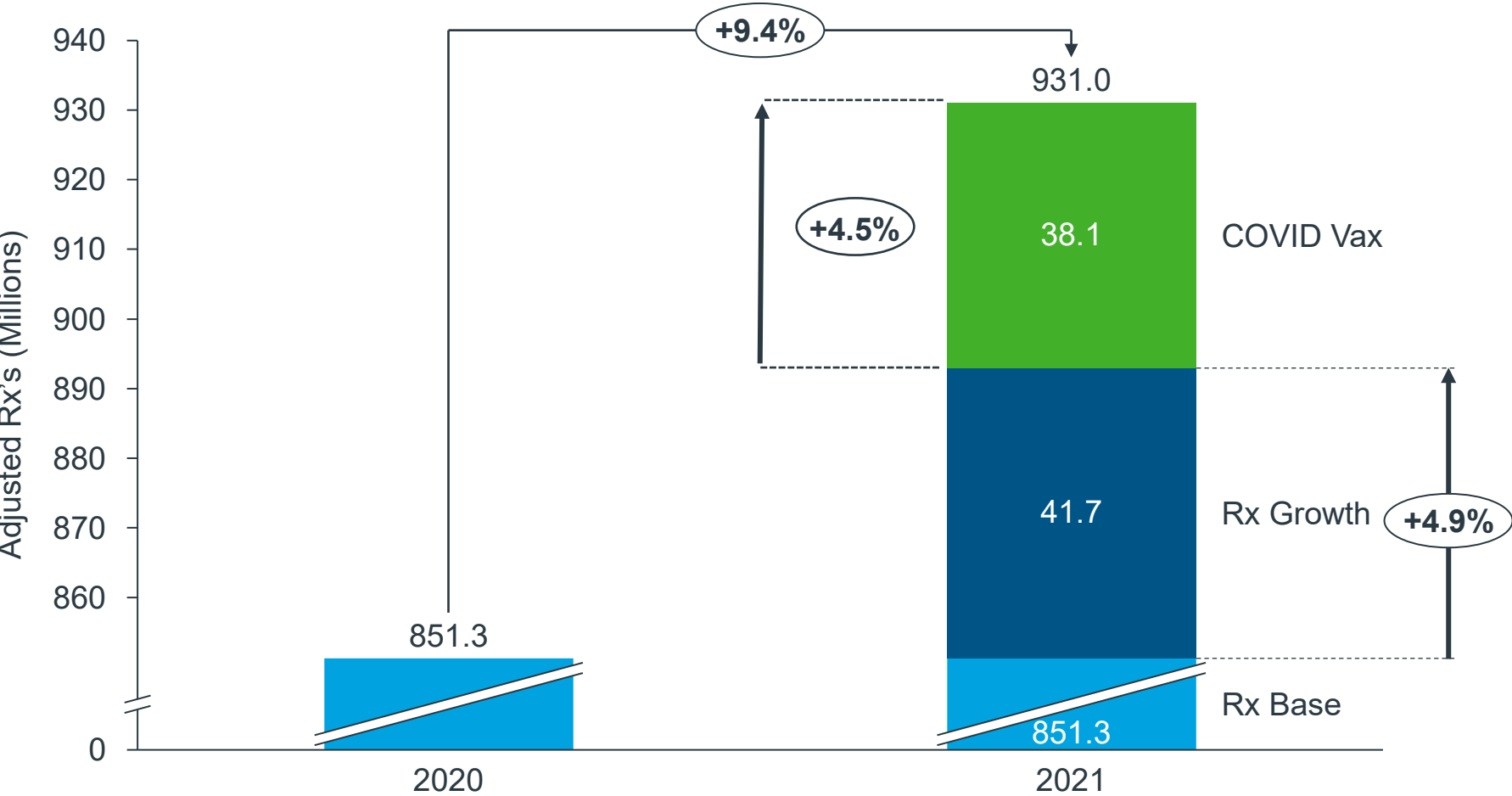
# Independents got growth contributions from COVID vaccines

INDEPENDENT

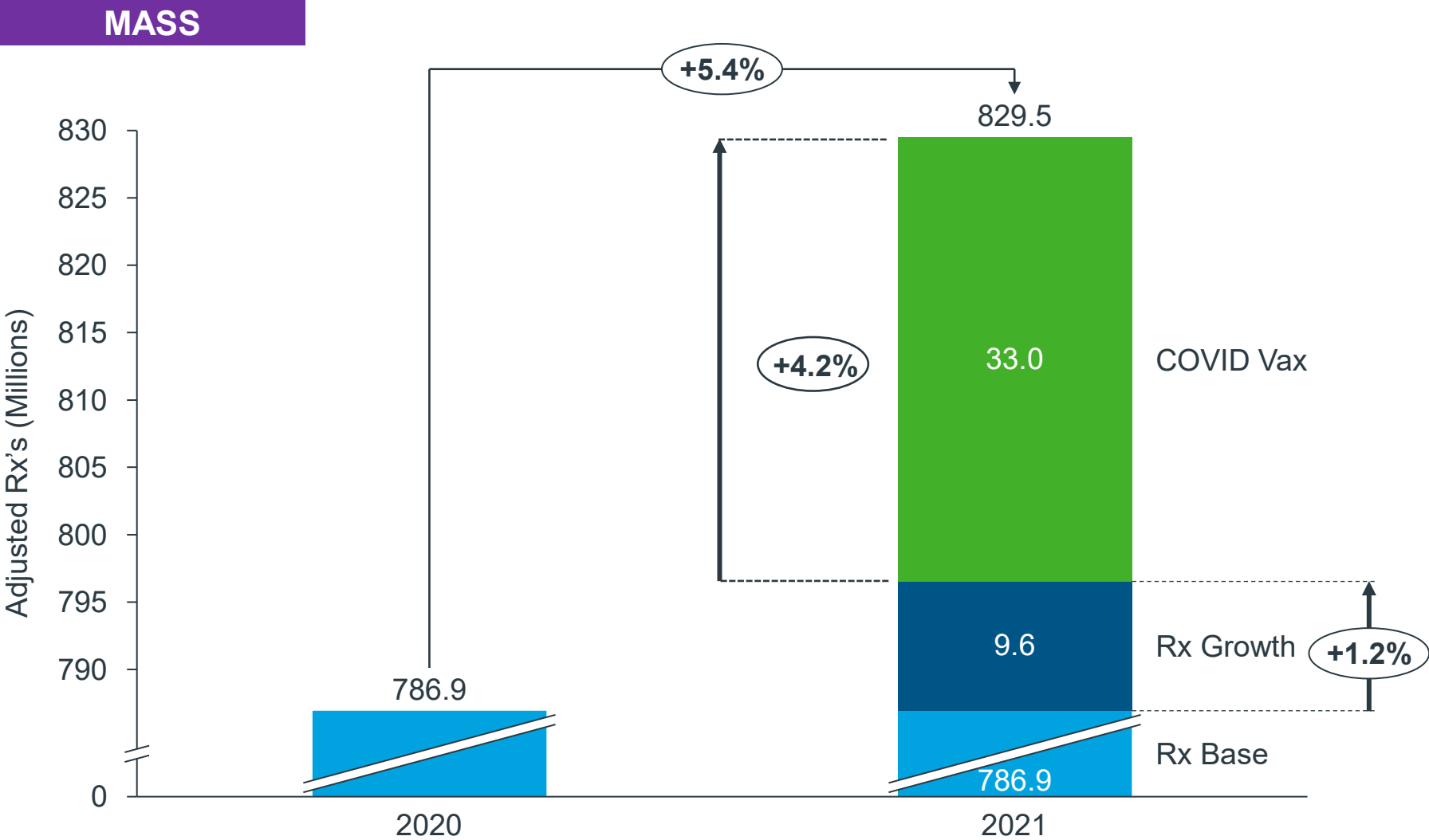


# Food saw COVID vaccines as a contributor but also saw very positive growth outside vaccines

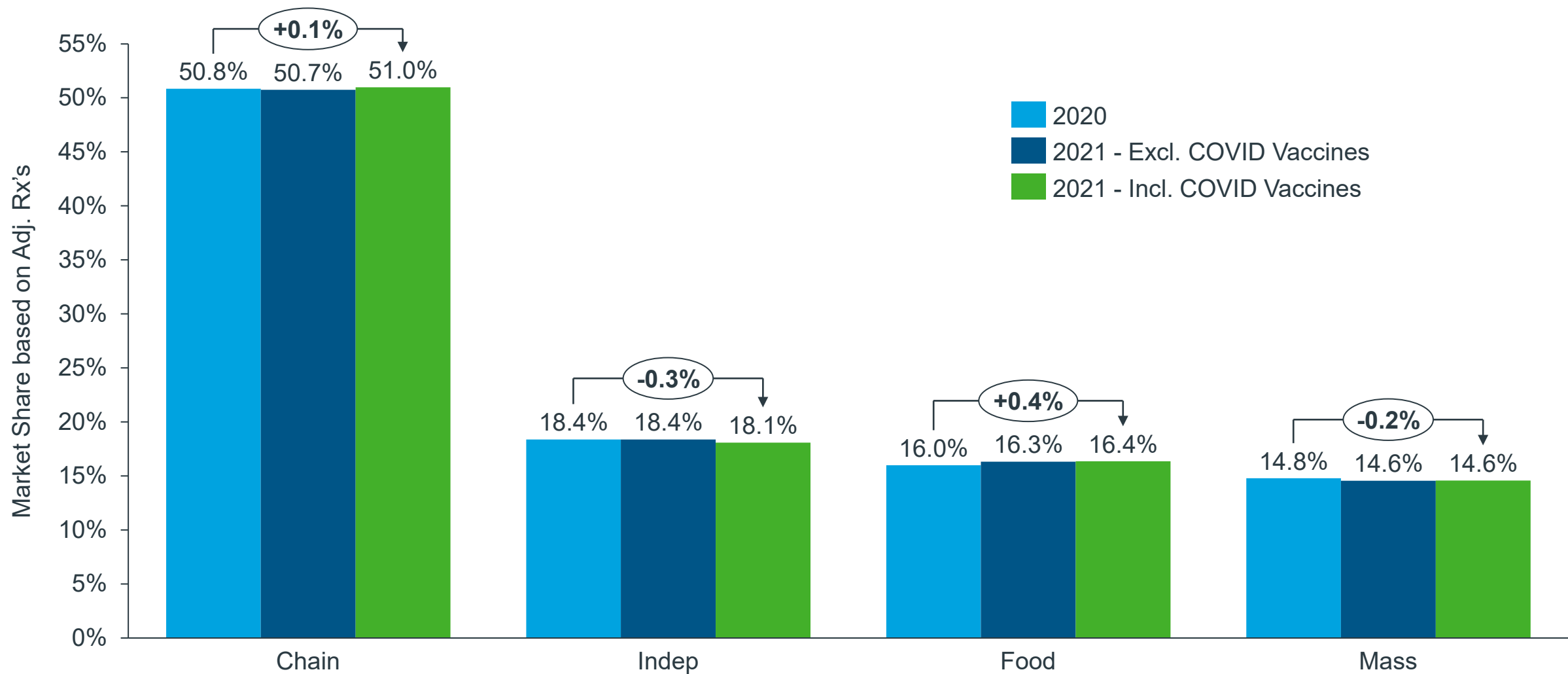
FOOD



# Mass growth was driven largely by COVID vaccines



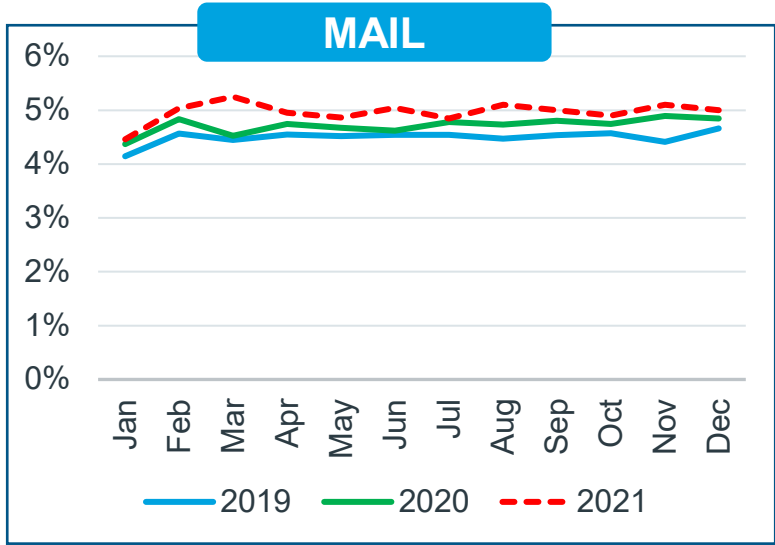
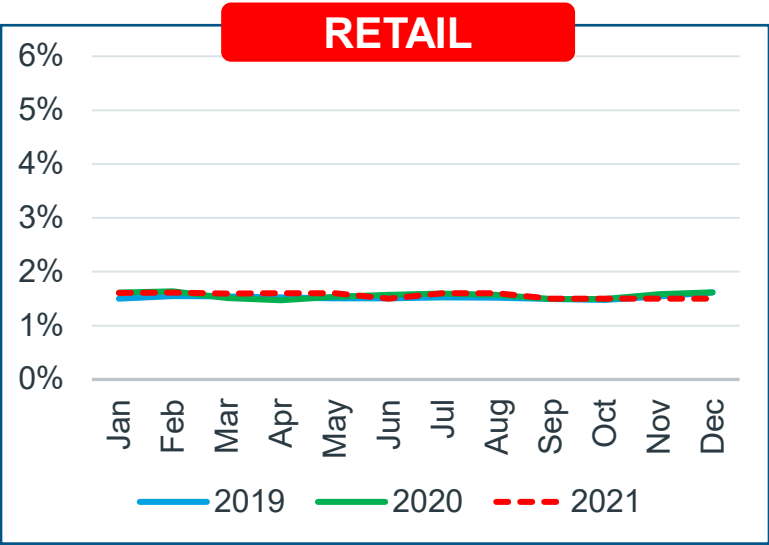
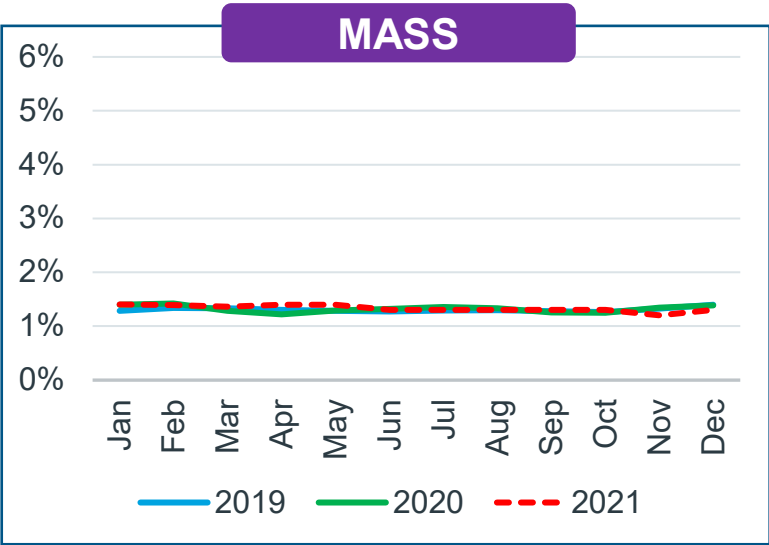
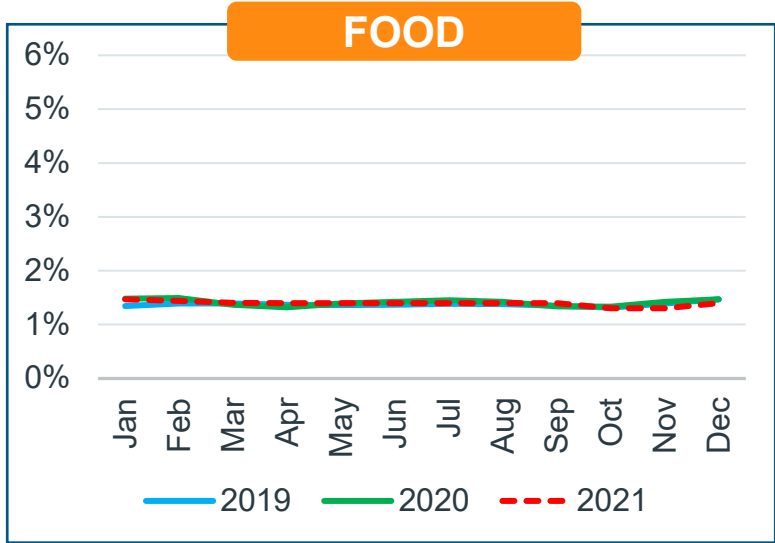
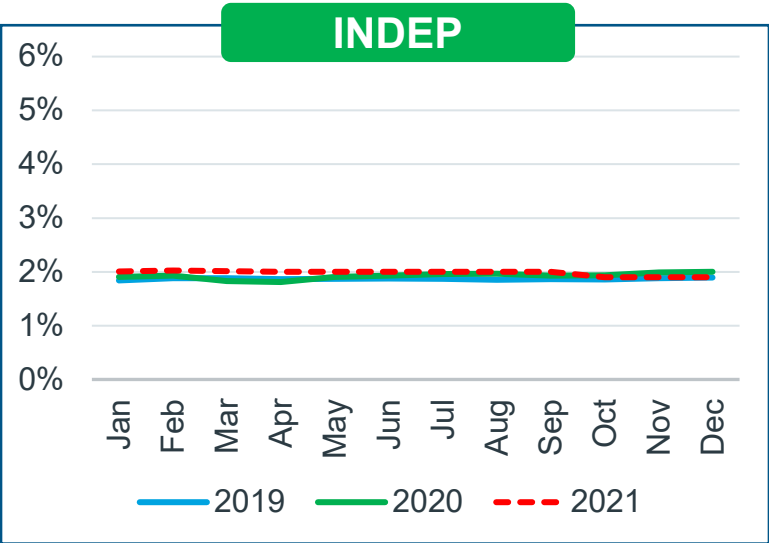
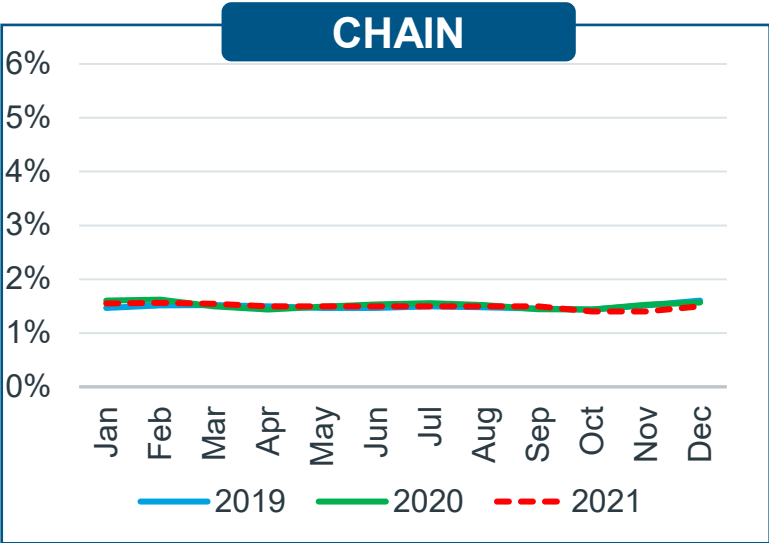
# Food continues to gain share



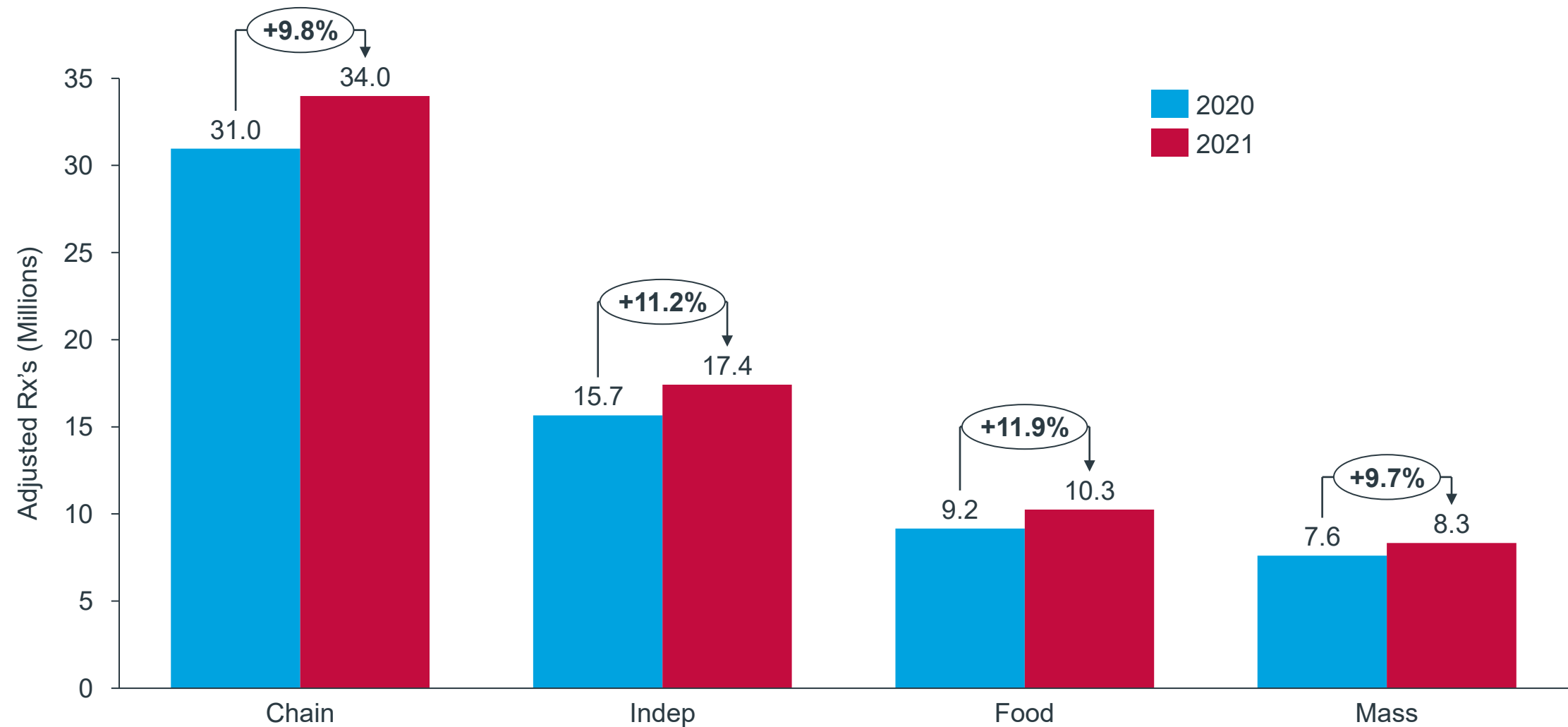
# Retail has approximately 1.6% Specialty Rx's while Mail averages about 5.1%

% of Specialty Rx's – Based on Unadj. Rx's

Excludes COVID Vaccines

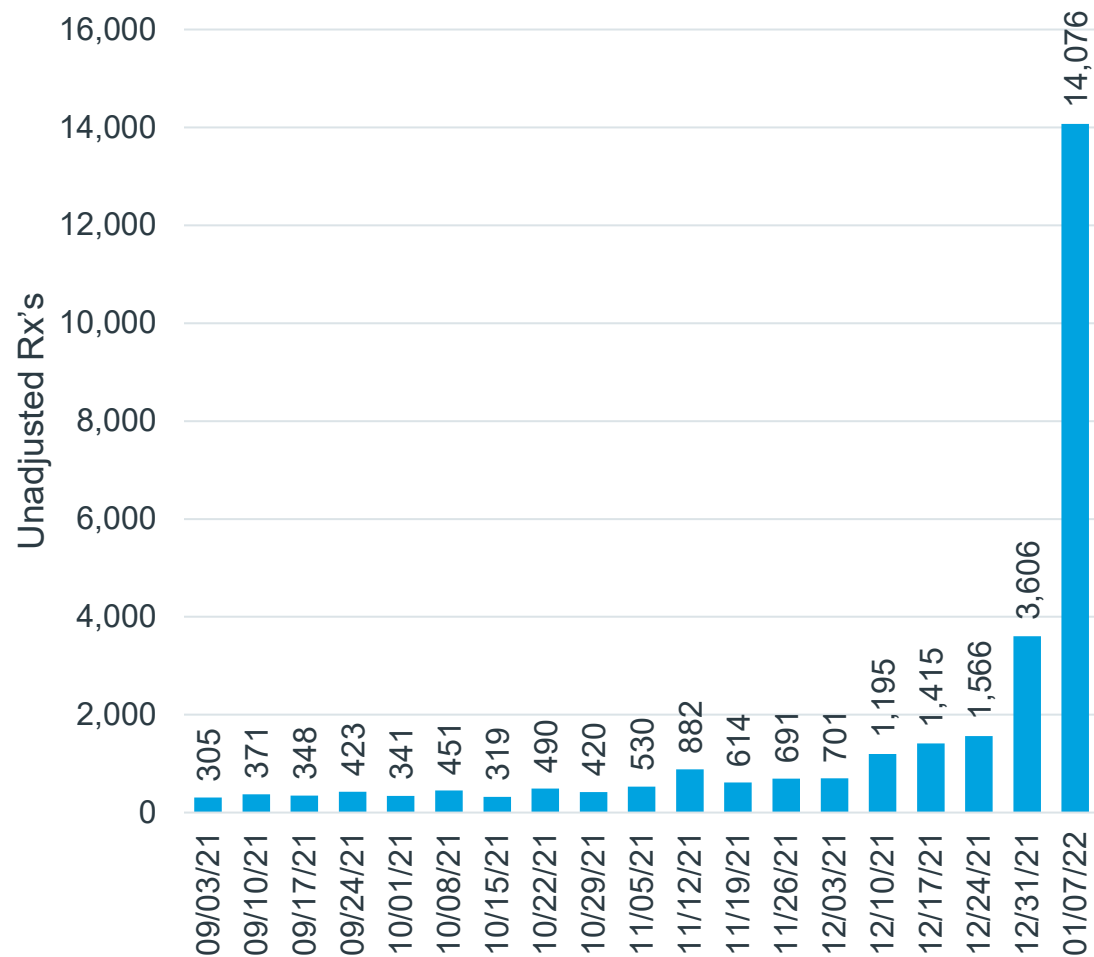


# Chain has the largest specialty volumes while all are experiencing strong growth rates

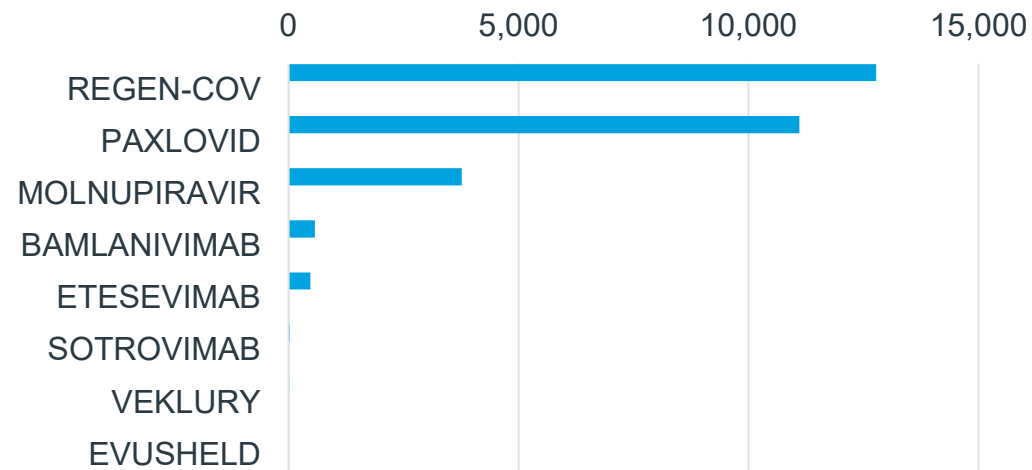


# Dispensing of the latest COVID Antivirals is trending upwards

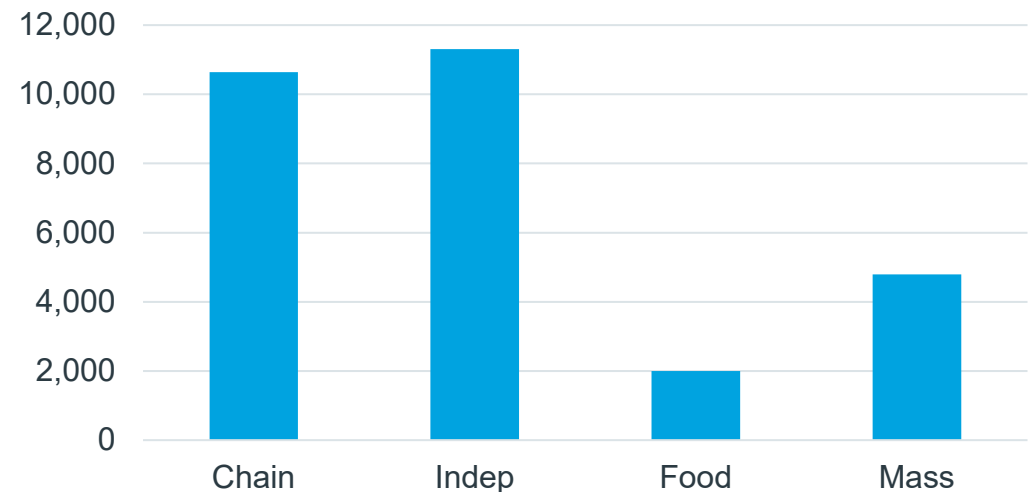
## Coronavirus Antivirals



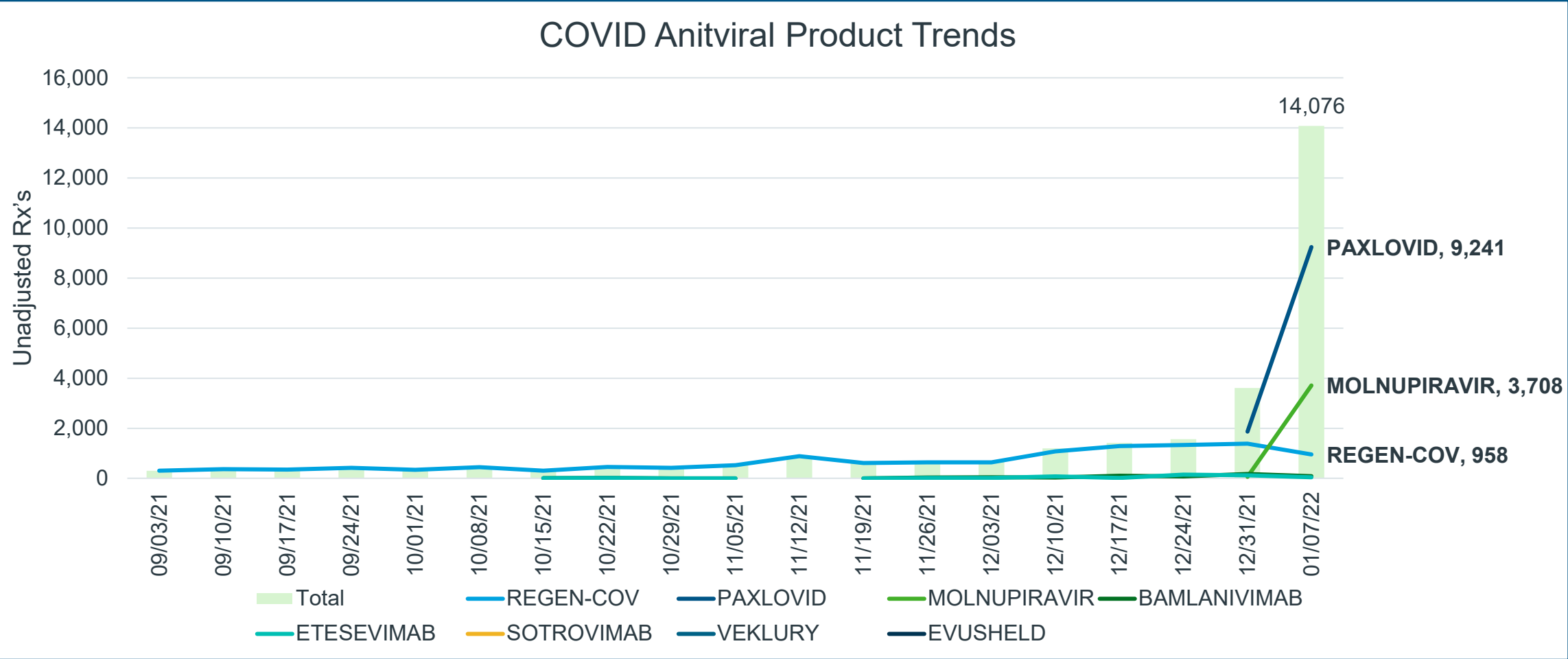
## Unadj. Rx's by Product Name



## Unadj. Rx's by COT



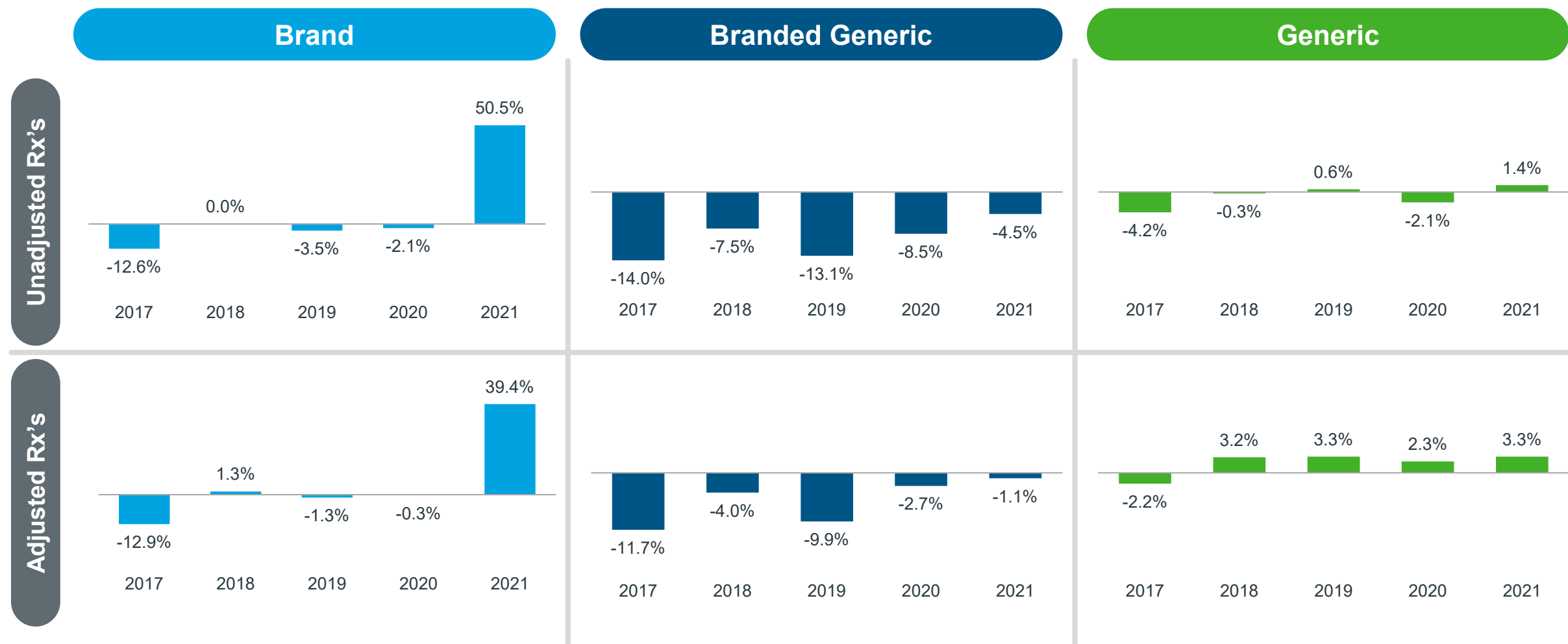
# Paxlovid and Molnupiravir dispensing are increasing quickly





# Generics & Biosimilars

# Brand Rx growth has exploded due to COVID vaccines



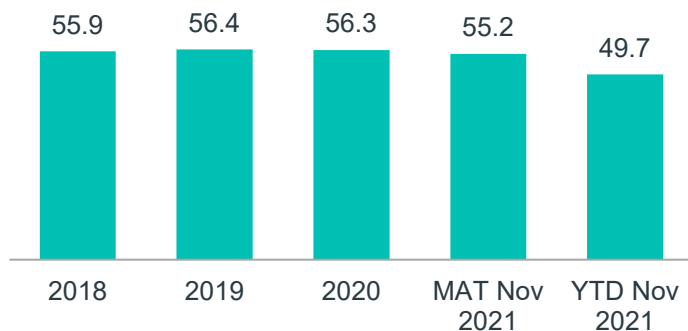
Source: IQVIA, RxInsights, 2022

Note: Limited to Rx and OTC Insulins; Includes Retail and Mail

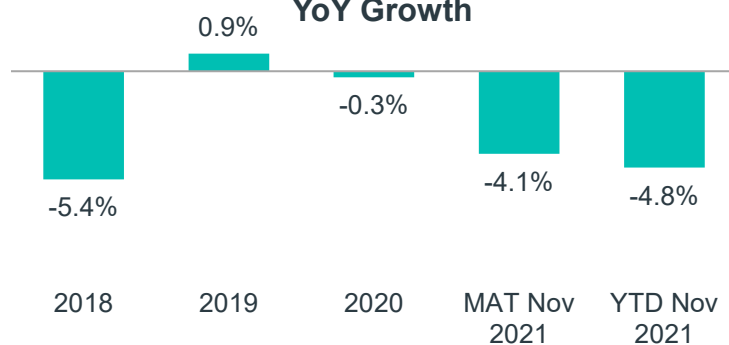
# Unbranded Generics show negative sales growth

Unbranded Generics

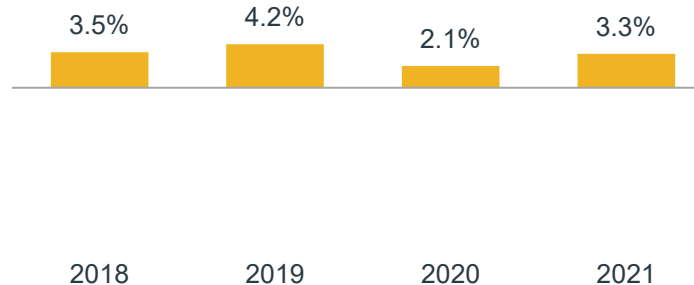
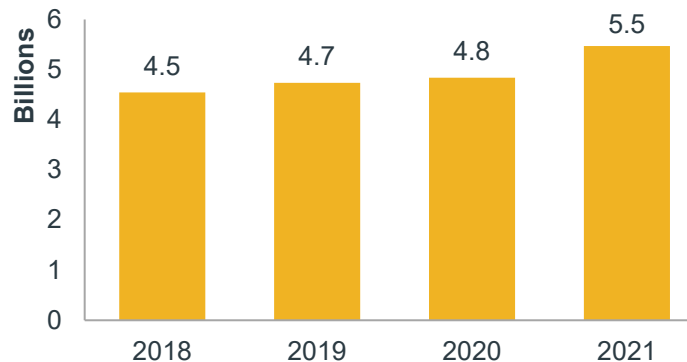
## Sales



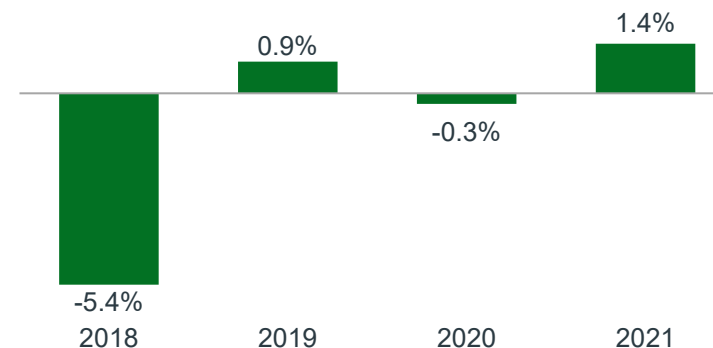
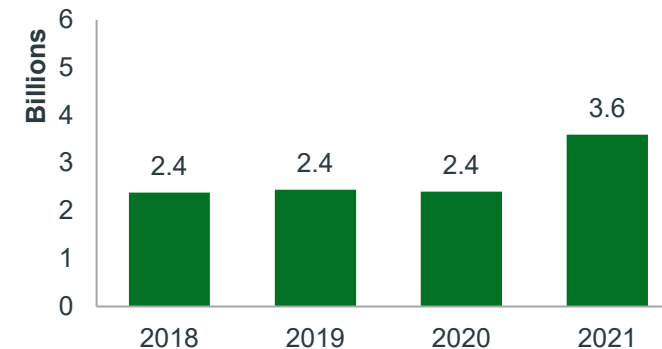
## YoY Growth



## Adjusted Rx's



## Unadjusted Rx's

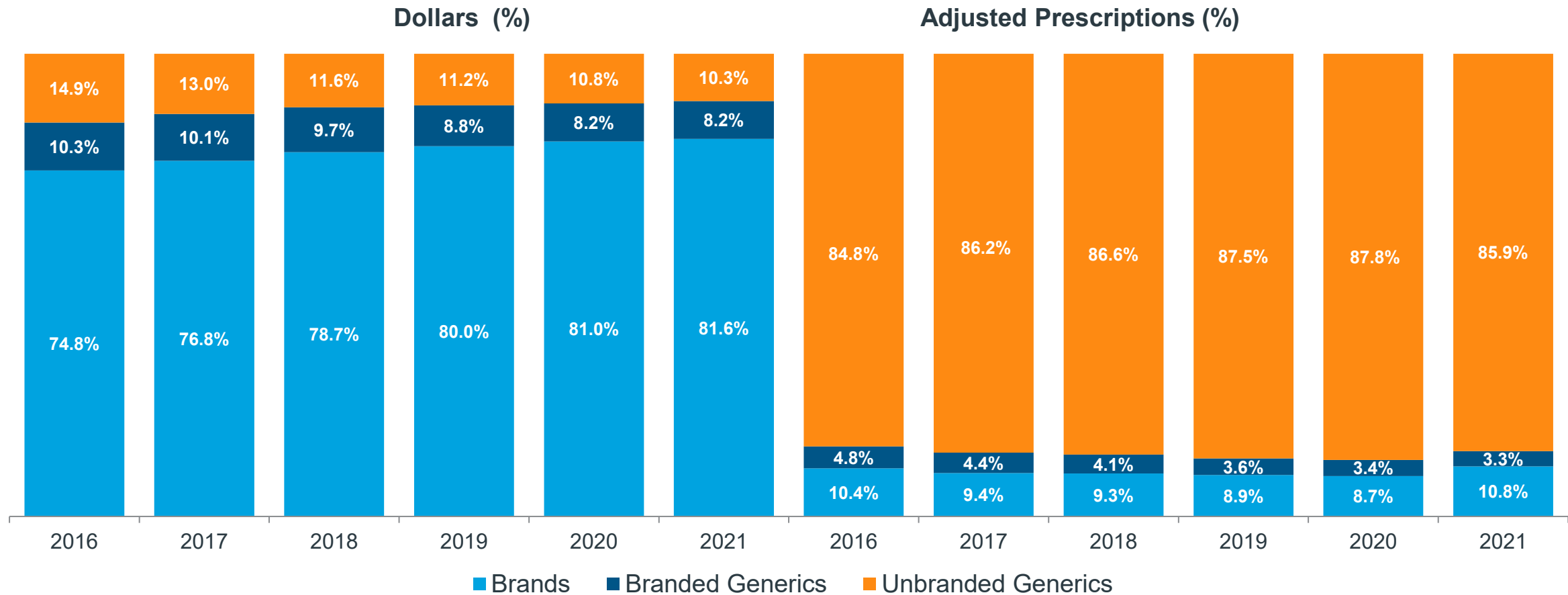


Source: IQVIA, National Sales Perspectives and RxInsights, 2022

Note: Limited to Rx and OTC Insulins; Includes Retail, Non-Retail and Mail

# 85.9% of prescriptions are dispensed as unbranded generics for 2021 (adjusted)

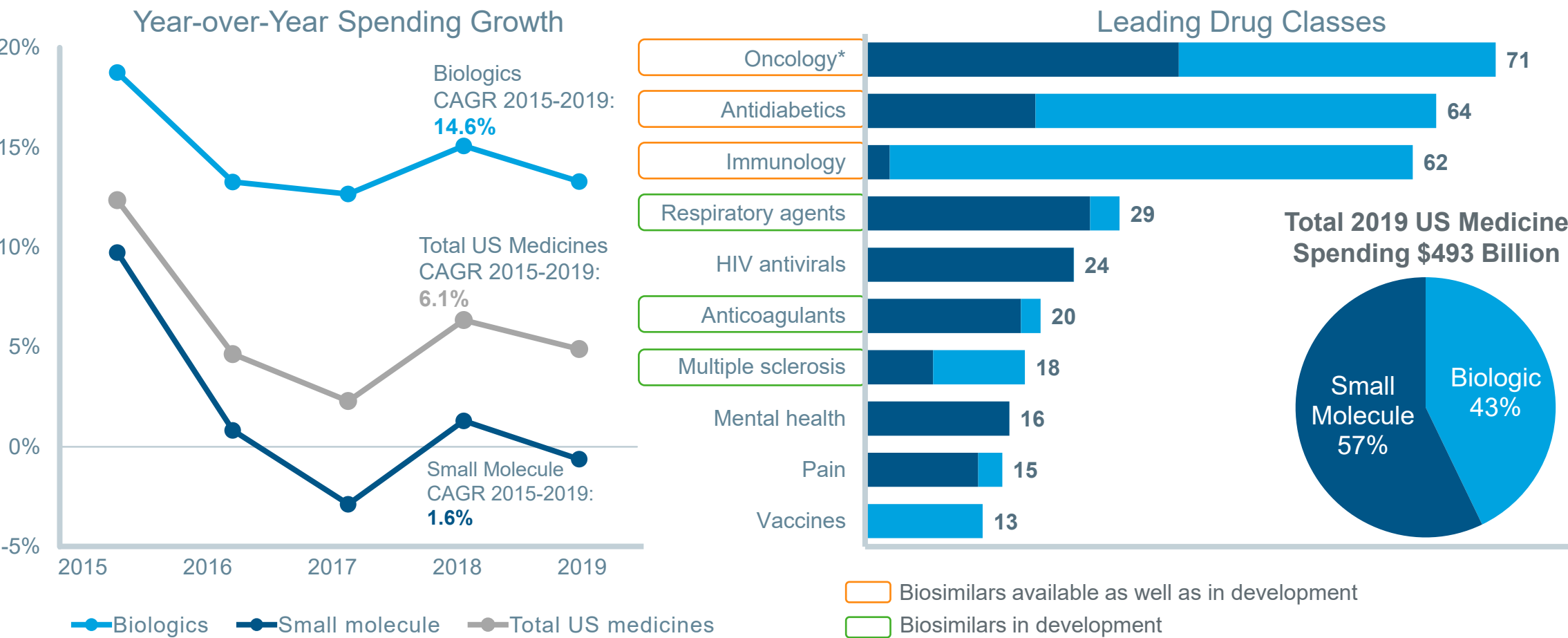
Unbranded and branded generics account for 18.4% of spending in 2021



Source: IQVIA, National Sales Perspectives, August 2021  
Note: Limited to Rx and OTC Insulins; Includes Retail, Non-Retail and Mail

# The U.S. biologics market continues to grow faster than non-biologics on an invoice-basis, and now comprises 43% of spending

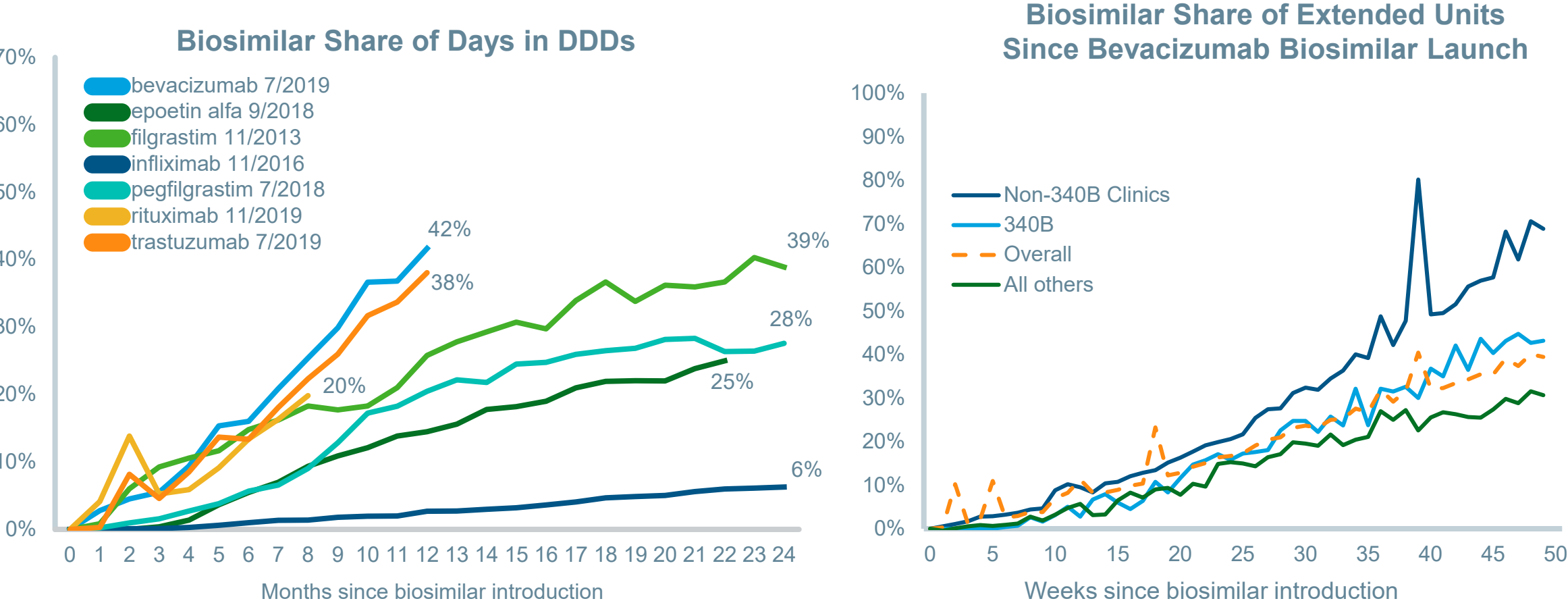
Total U.S. Invoice Spending Growth by Type and Leading Therapy Areas by 2019 Spending, US\$Bn



Source: IQVIA MIDAS®; IQVIA Institute, Jun 2020

# Recent biosimilars have achieved high volume shares, projected to reach more than 50% within the first two years, varying by channel

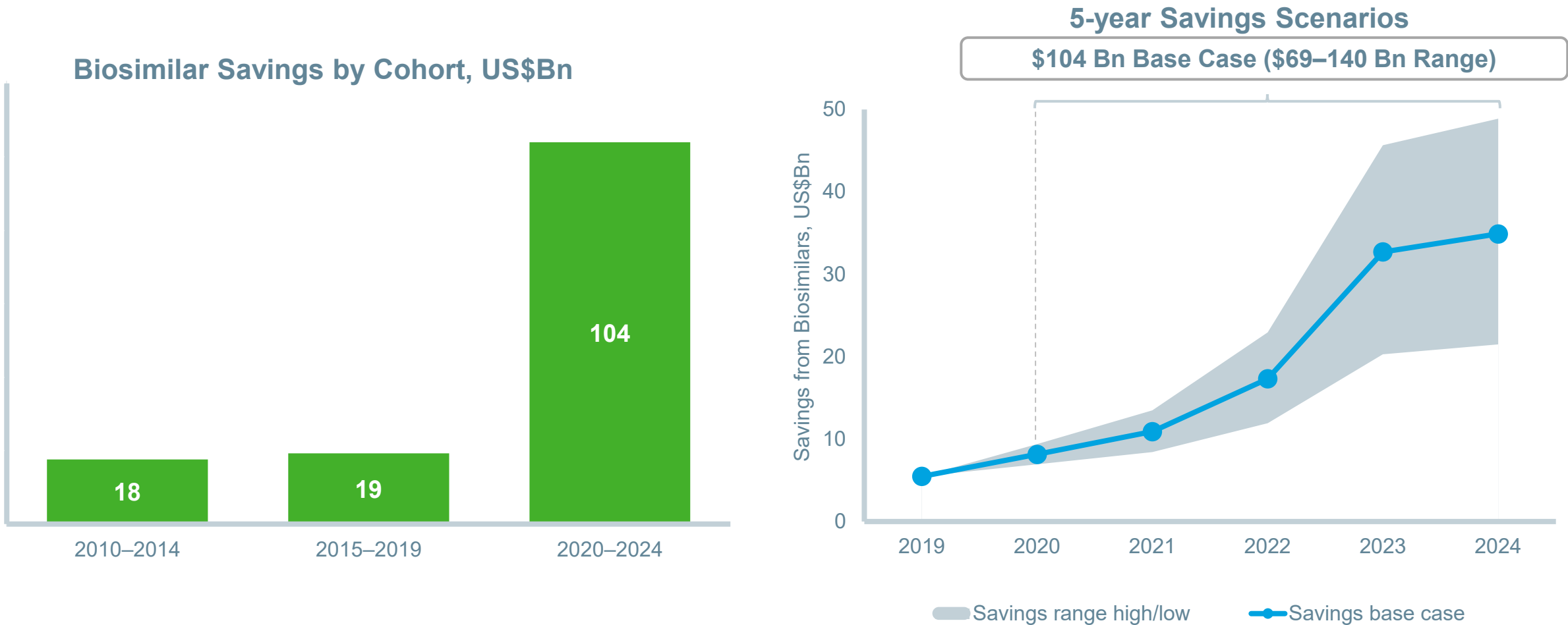
Biosimilar Share of Volume Since Biosimilar Launch



Source: IQVIA MIDAS®, Jun 2020

# Savings over the next five years as a result of biosimilars are projected to exceed \$100 billion, though uncertainties remain

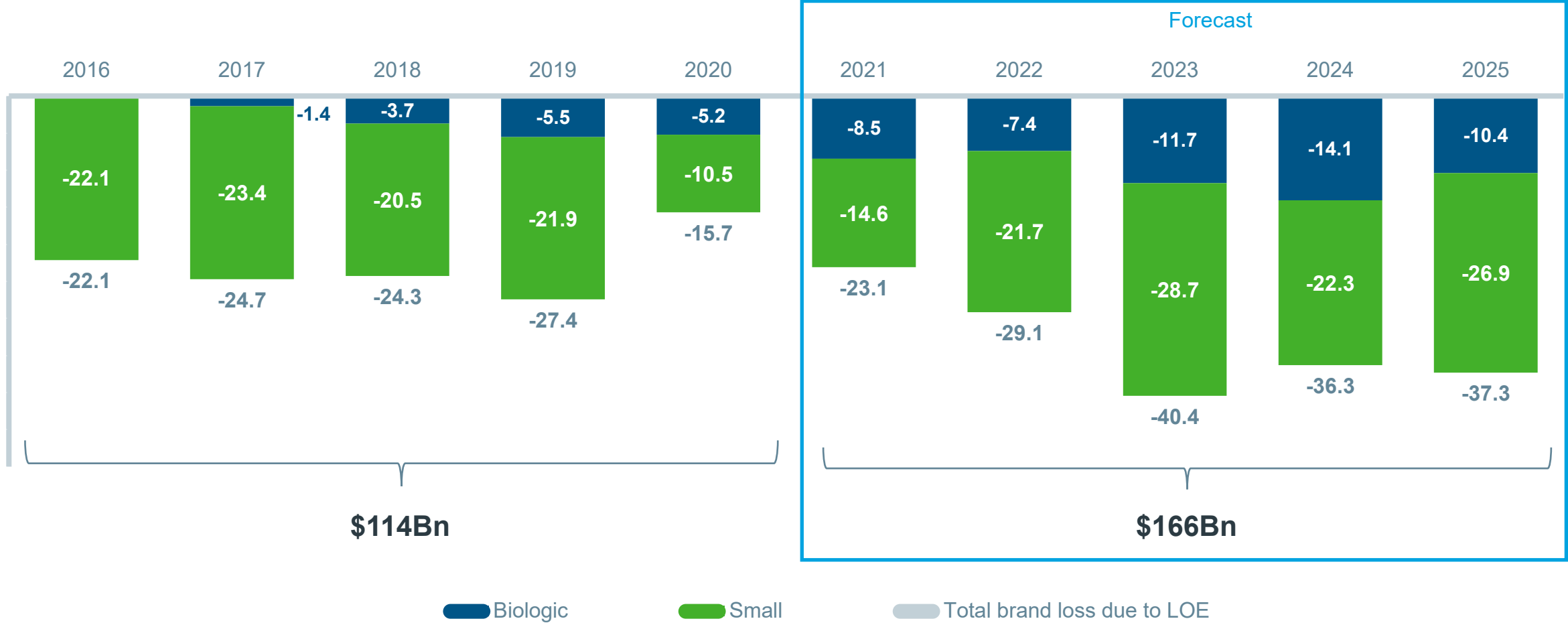
*Biologic Estimated Savings from Biosimilars at Invoice Prices*



Source: IQVIA National Sales Perspectives, Jun 2020; IQVIA Institute, Sep 2020

# The impact of exclusivity losses will increase to \$166 billion over the next 5 years mostly due to the availability of biosimilars

Developed Markets Impact of Brand Losses of Exclusivity 2016–2025, US\$Bn



Source: IQVIA Market Prognosis, Sep 2020; IQVIA Institute, Feb 2021



# Product Launches

# Executive summary

*Pharmaceutical companies continue to bring new products to market despite the uncertainty introduced by the COVID-19 pandemic; there were 71 launches through December 2020 in line with 69 launches for the same period in 2019. To date, 2021 has seen a similar rate of product launches compared to 2019 and 2020*

70

Launches thru  
Nov 2021



## Top Therapy Areas of 2021 Launches

Oncology



34%

CNS



14%

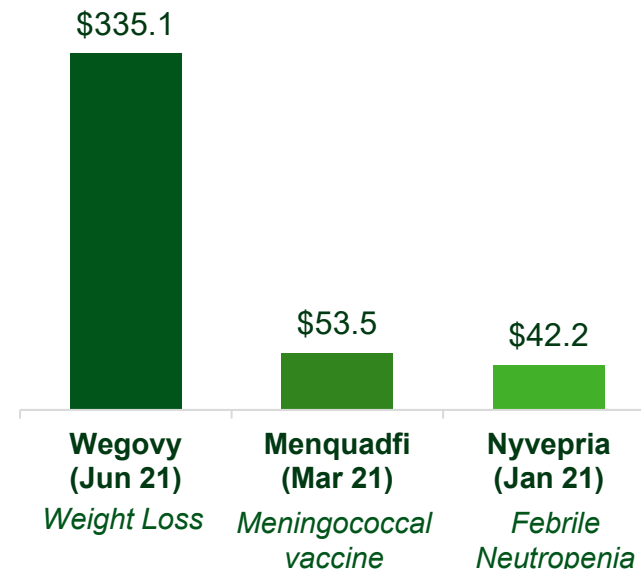
Infectious



14%



## Top 2021 Launches by Sales (millions)



43

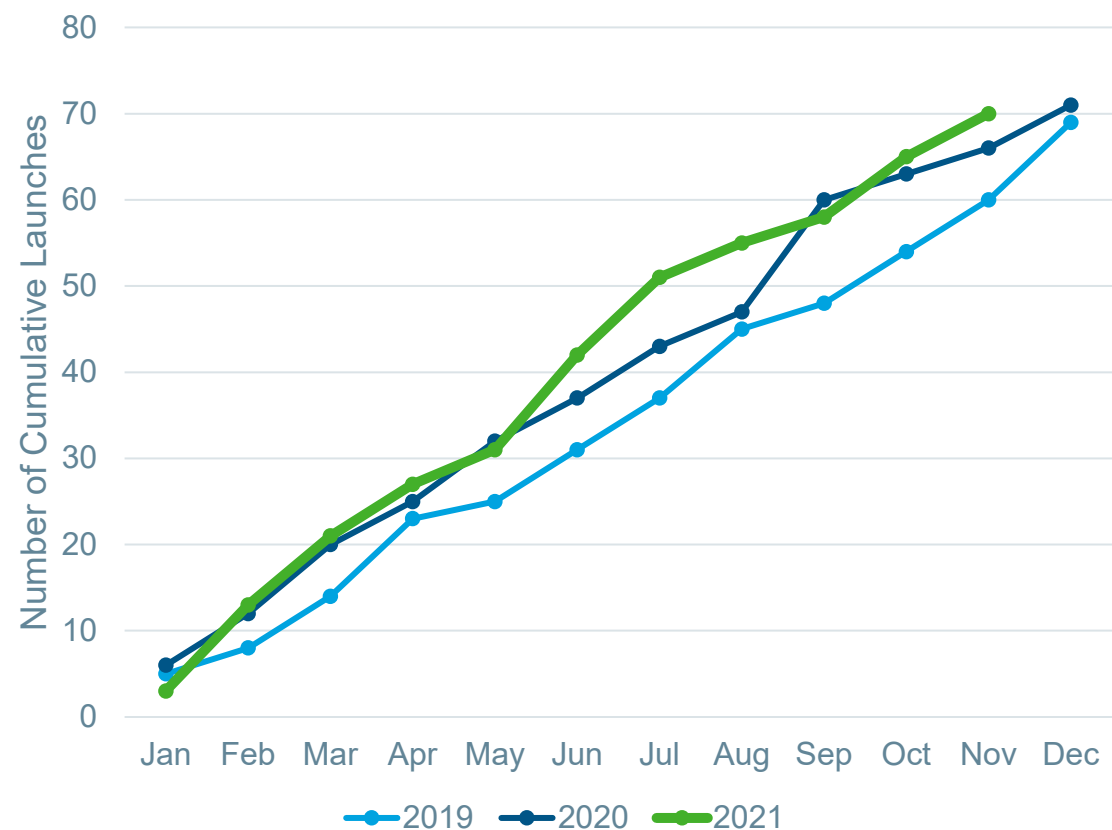


**Of the 45 FDA approved New Molecular Entities (NMEs) in 2021** show evidence of launch based on supply in channel or active websites

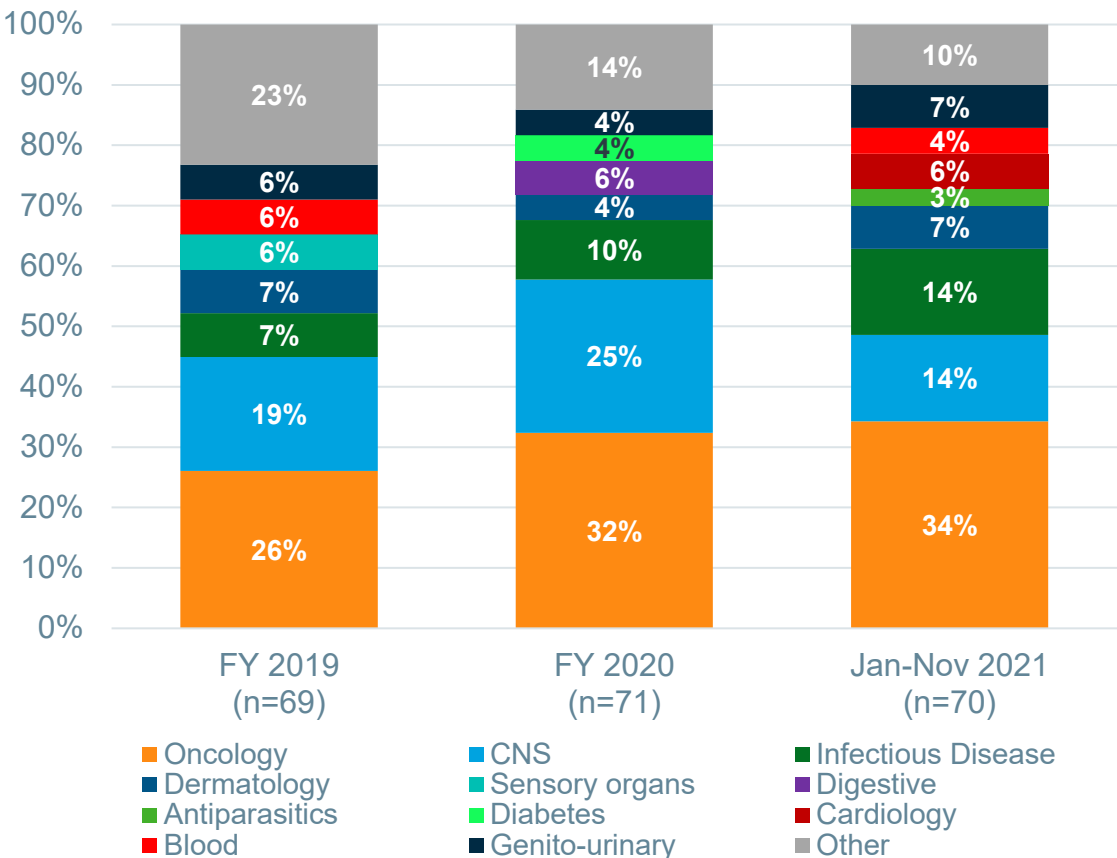
**In 2020, the FDA approved New Molecular Entities (NMEs).** Of those 44 out of 49 show evidence of launch.

# COVID has not significantly impacted the number of launches; 2020 and 2021 have seen similar rates of product launches compared to 2019

Time Aligned Cumulative Launches:  
2019 vs 2020 and 2021

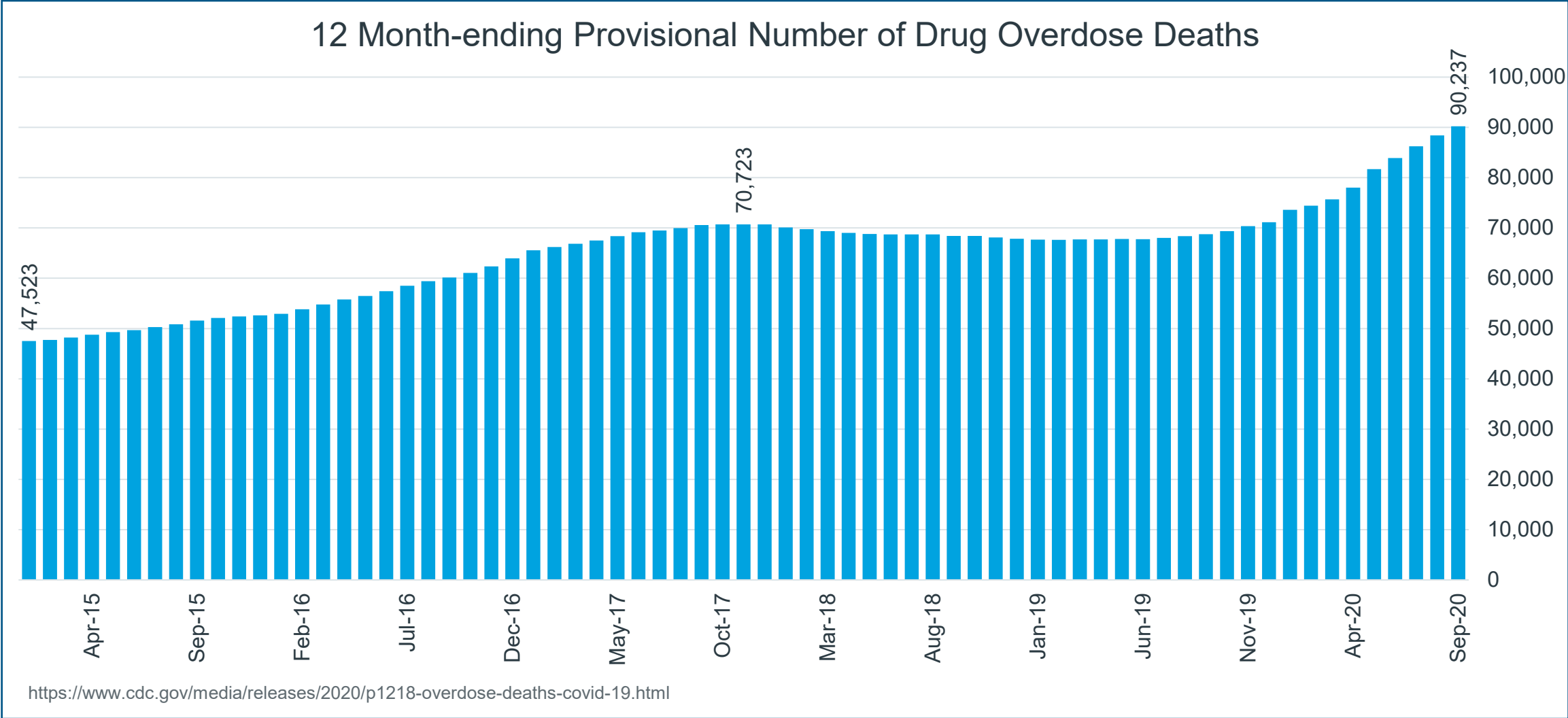


Launches by Therapy Area  
Jan 2019 – Nov 2021



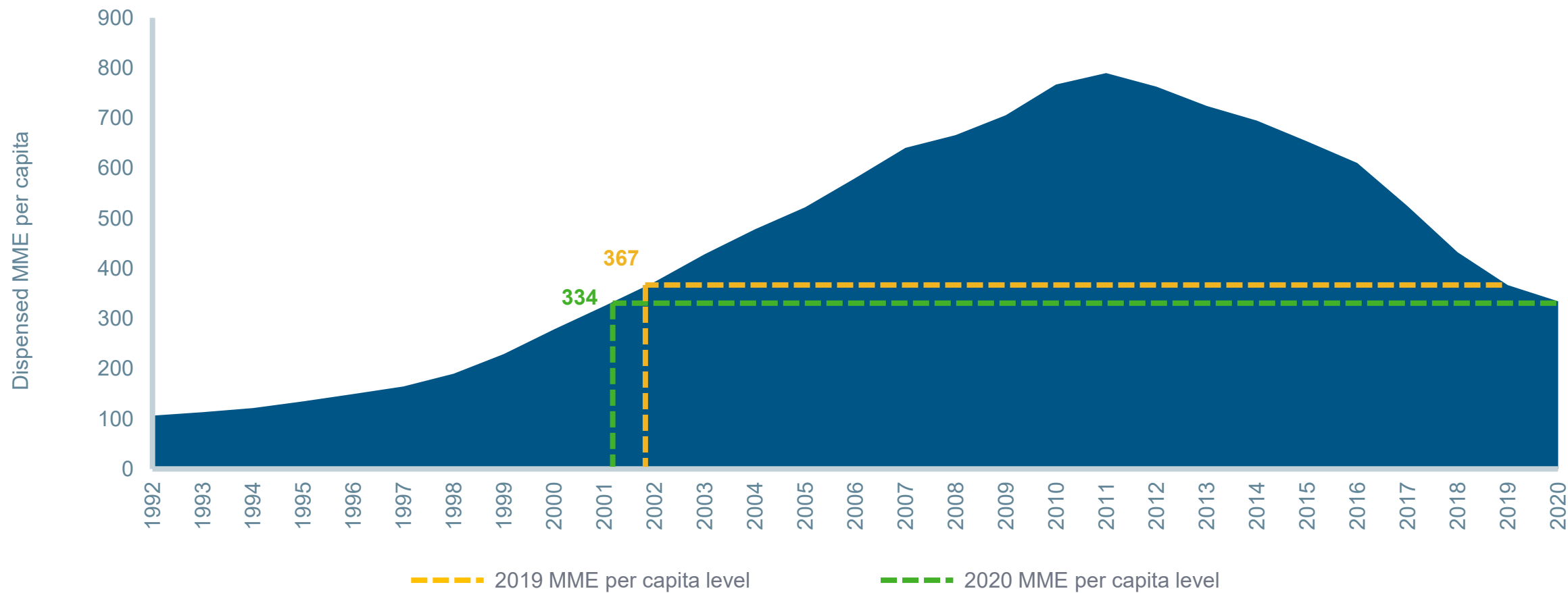
# Opioids

# Over 90,000 drug overdose deaths occurred in the US in the 12 months ending September 2020



# Continued declines have brought normalized per capita prescription opioid use near the 2001 level

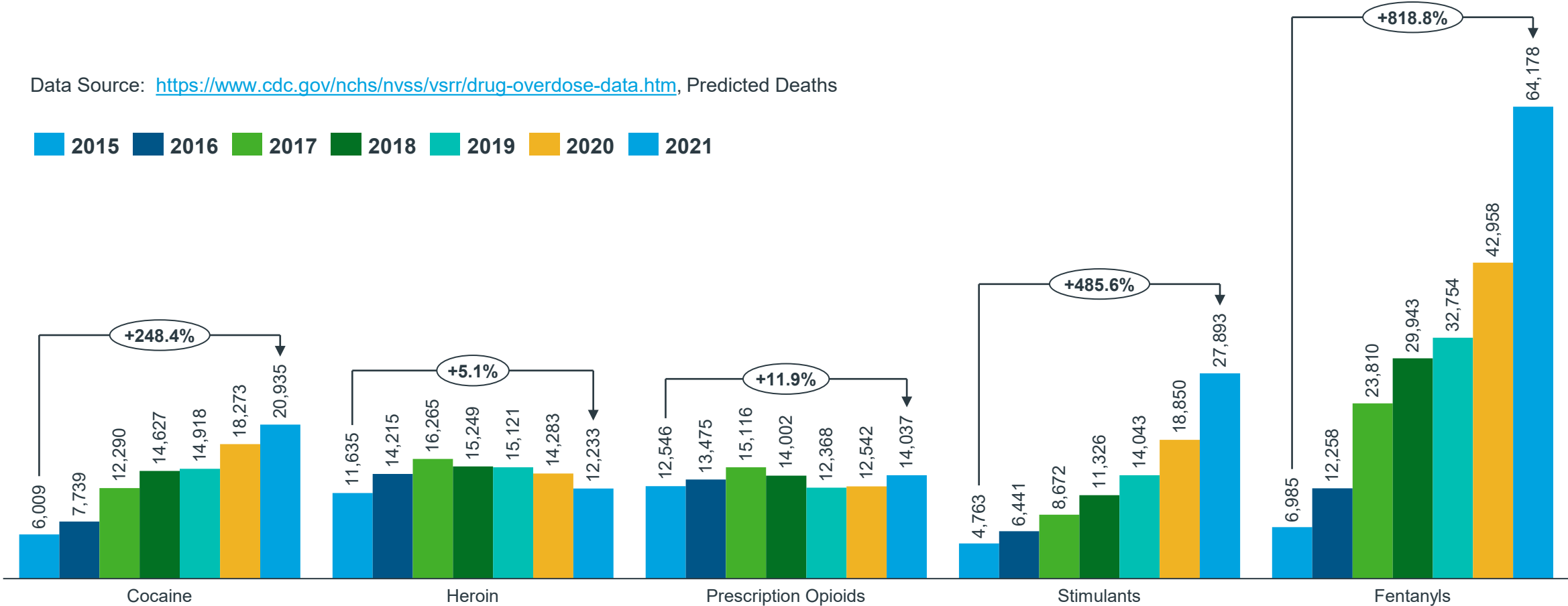
*Prescription Opioid Use in Morphine Milligram Equivalents (MME) per Capita, 1992–2020*



Source: IQVIA Xponent, Apr 2021; IQVIA National Prescription Audit; IQVIA Institute, Jul 2021

# Fentanyl continues to be the leading cause of overdose deaths

Data Source: <https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>, Predicted Deaths



Notes: Data is based on 12 months ending April 2021, Cocaine = Cocaine (T40.5), Heroin = Heroin (T40.1), Prescription Opioids = Natural & Semi-synthetic Opioids (T40.2), Stimulants = Psychostimulants with abuse potential (T43.6) and Fentanyl = Synthetic Opioids, Excl. Methadone (T40.4)

# Outlook for 2021



# There have been a series of legacy considerations recognized across stakeholders

## Pharmacies

- Reimbursement
- Controlled Substances
- Access to Specialty Drugs
- Purchasing Alliances
- Track and Trace
- Amazon, Digital pharmacies and cash customers

## Generic Manufacturers

- Purchasing Alliances
- Portfolio Optimization (“Shrink to Grow”) / Market Saturation
- Brand /niche drugs (complex generics)
- Generic Price Deflation
- Which approvals to launch?

## Wholesalers

- Contract Negotiations
- Controlled Substances
- Generic Price Deflation / Slow Brand Inflation
- Track and Trace
- Purchasing Alliances

## Brand/Specialty Manufacturers

- Price increase backlash
- Becoming more specialized / Oral Specialty
- Declining Hep C and Pain Dollars
- Orphan Drugs
- Copay accumulators

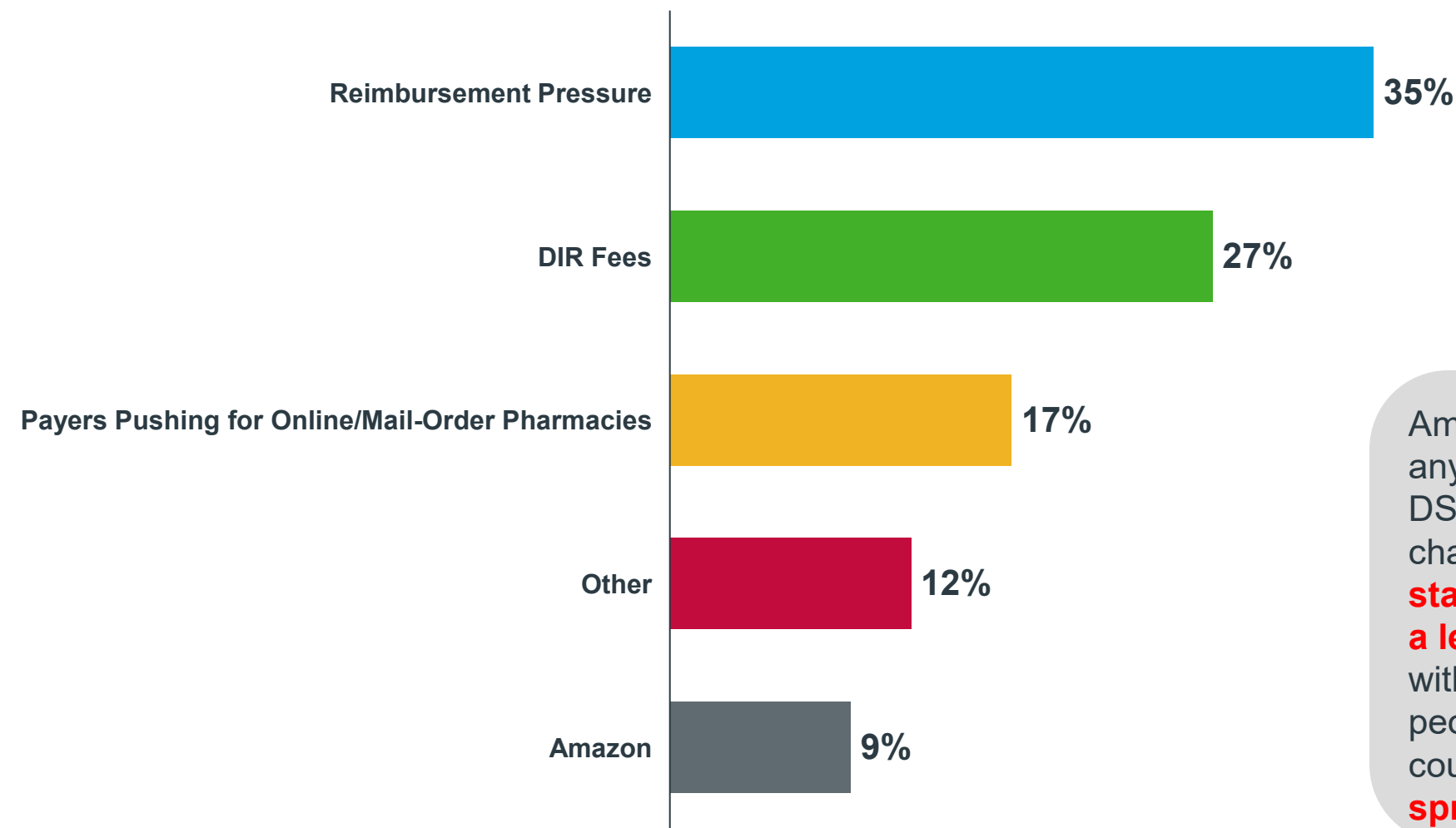
## Payers

- Managing Specialty Drug Costs
- Rising Oncology costs
- Formularies blocks and exclusive launches

## Consumers

- Rising costs: high out-of-pocket costs / coinsurance / accumulators
- Quality of Insurance Coverage
- Specialty Tiers

# Drugstore News recently put the following question out to their readers, “What is pharmacy’s biggest challenge?”



Among the 12% who didn’t think any of the answers supplied by DSN constituted the biggest challenge in the industry, **staffing concerns emerged as a leading area of concern** — with many noting that fewer people staffing the pharmacy counter means **pharmacists are spread too thin.**

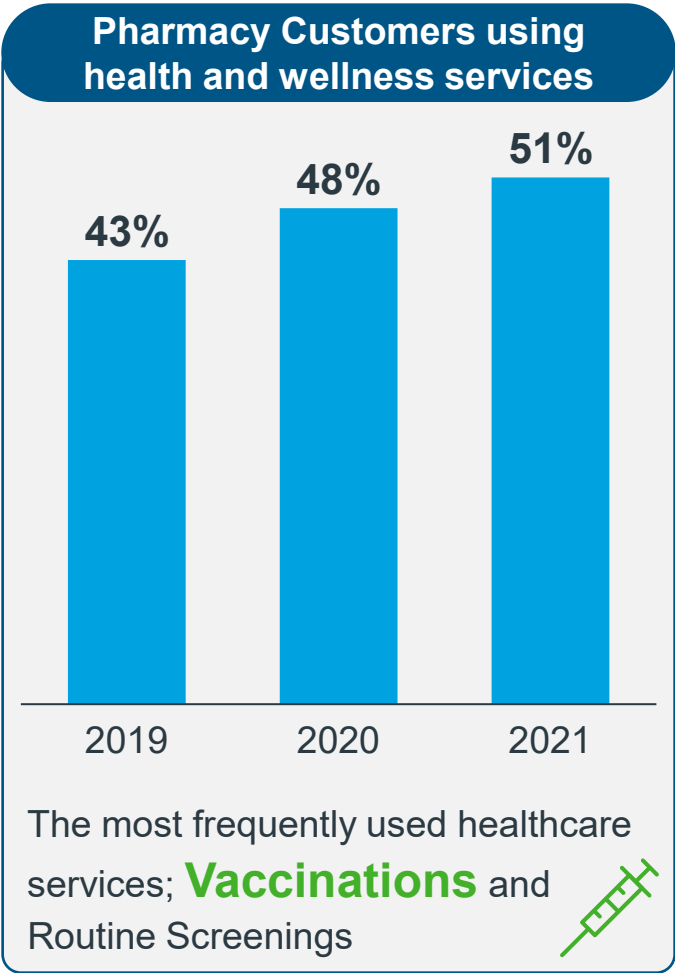
<https://drugstorenews.com/poll-results-reimbursement-top-mind>, 8/4/2021

# Patients visit pharmacies 10x more frequently than they see other healthcare providers<sup>1</sup>



<sup>1</sup> Hemberg N, Huggins D, et al. Innovative Community Pharmacy Practice Models in North Carolina. North Carolina Medical Journal. June 2017. <http://www.ncmedicaljournal.com/content/78/3/198.full>  
IQVIA© 2021 Confidential & Proprietary

# 51% of pharmacy customers have used health and wellness services over the last year according to J.D. Powers



Source: J.D. Powers 2021 US Pharmacy Study

**Other key findings**

Customers who use at least **1** health and wellness-oriented service spend an average of **\$5** more than those who do not use these services

Overall satisfaction and brand advocacy scores also increased **24** points when customers utilized wellness services

Mobile app integration in pharmacies is becoming **increasingly vital**:

- 26** percent of brick-and-mortar customers
- 27** percent of small order customers accessed their pharmacy's mobile app

Satisfaction with brick-and-mortar mobile apps landed at **848**, and overall satisfaction with mail-order mobile apps was **868**

Researchers noted that both of these scores are higher than the average mobile app or text message satisfaction score of **826** seen in the J.D. Power 2021 Commercial Member Health Plan Study

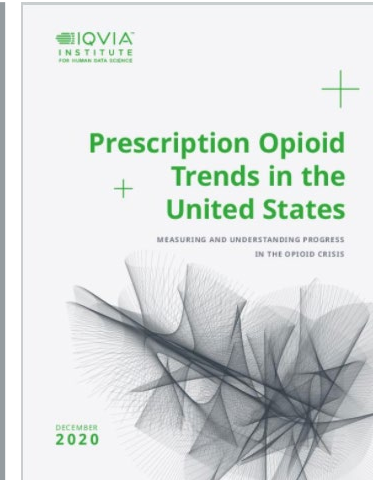
# The IQVIA Institute produces a number of reports on a regular basis that you might find useful, check them out



Despite the COVID-19 pandemic having a substantial impact on patient care during 2020, the scientific advances in clinical trial activity, the pipeline of new treatments, and the increased use of available therapeutics, continued largely unaffected and reflect the commitment to advancing care for patients by oncologists, other care providers, governments and payers, and life sciences companies.



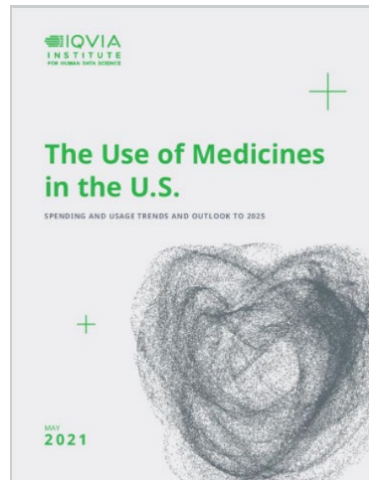
This report examines the trends in pharmaceutical research and development through the end of 2020. It provides an analysis of initiated clinical trials, including the impact of the pandemic and COVID-19-specific research. Research on clinical development productivity is also presented, as well as profiles of the R&D pipeline, R&D funding trends, and characteristics of new drug approvals and launches.



The opioid epidemic has captivated the country for a decade, although it lost attention this year in the face of the COVID-19 pandemic, which affected the life and healthcare of patients with chronic pain and addiction and so many others.



The future level of global spending on medicines has implications for healthcare systems and policymakers across developed and emerging economies, and these issues are even more important in light of the ongoing global COVID-19 pandemic.



The U.S. health system demonstrated resilience and flexibility during 2020, recovering toward its pre-pandemic levels of activity and progressing into 2021, even as the backlog of missed or delayed activity remains substantial. Medicine supply was largely maintained and spending on medicines increased by less than 1% on a net price basis.



Innovation in digital health tools, including mobile health apps and wearable sensors, bring new approaches to the management of health conditions. Digital therapeutics to treat human disease are being approved by regulatory agencies around the world and routes to reimbursement are being established as developers generate and submit high-quality data on effectiveness to payers and employers.

All these reports and others can be found at: <https://www.iqvia.com/insights/the-iqvia-institute/reports>

# Thank you

## Disclaimer:

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- As with any attempt to estimate future events, the forecasts, projections, conclusions, and other information included herein are subject to certain risks and uncertainties, and are not to be considered guarantees of any particular outcome.
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Doug Long is Vice President of Industry Relations at IQVIA (formerly QuintilesIMS), the world's largest pharmaceutical information company. IQVIA offers services to the pharmaceutical industry in over 100 countries around the globe. Doug has been with IQVIA since 1989.

His fundamental task is to help secure data for all existing and new databases supported by IQVIA, manage supplier, manufacturer & association relationships, and develop information for data partners. As direct consequence of his involvement in these areas, Doug has considerable experience with, and a unique perspective on, the changing U.S. and global healthcare marketplace and pharmaceutical distribution.

Doug is a frequent industry speaker and the recipient of many awards from trade groups. Before joining IQVIA Doug held positions at Nielsen Market Research for 16 years in various sales and marketing capacities. A native of Illinois, Doug received a BA from DePauw University and holds an MBA in management from Fairleigh Dickinson University.

[doug.long@iqvia.com](mailto:doug.long@iqvia.com)





## **Scott Biggs, *Director, Supplier Services***

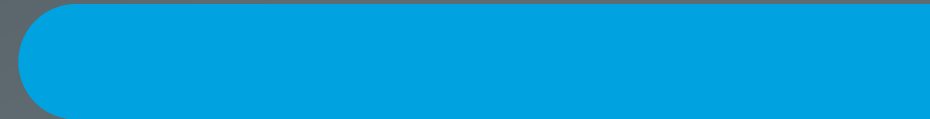
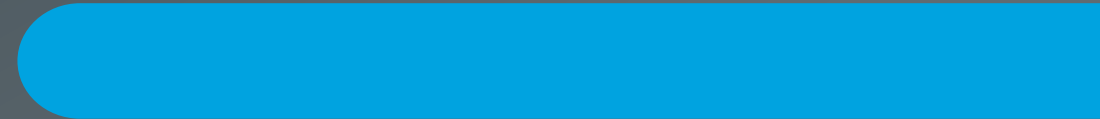
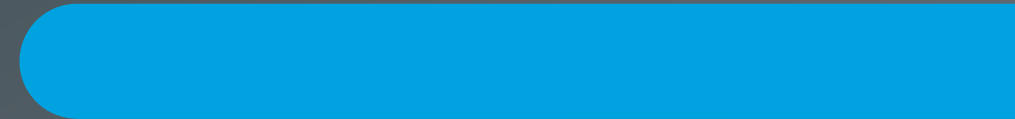
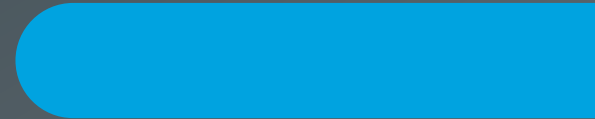
Scott Biggs is Director of Supplier Services at IQVIA (previously known as QuintilesIMS), the world's largest pharmaceutical information company, serving over 101 countries. He has been with IQVIA since 2011.

Prior to IQVIA Scott worked for other pharmaceutical information companies for several years and worked at Rite Aid Corporation in multiple roles for over 10 years. Scott received a BS degree from Penn State University in Accounting and has been working with pharmacy data for almost 25 years.

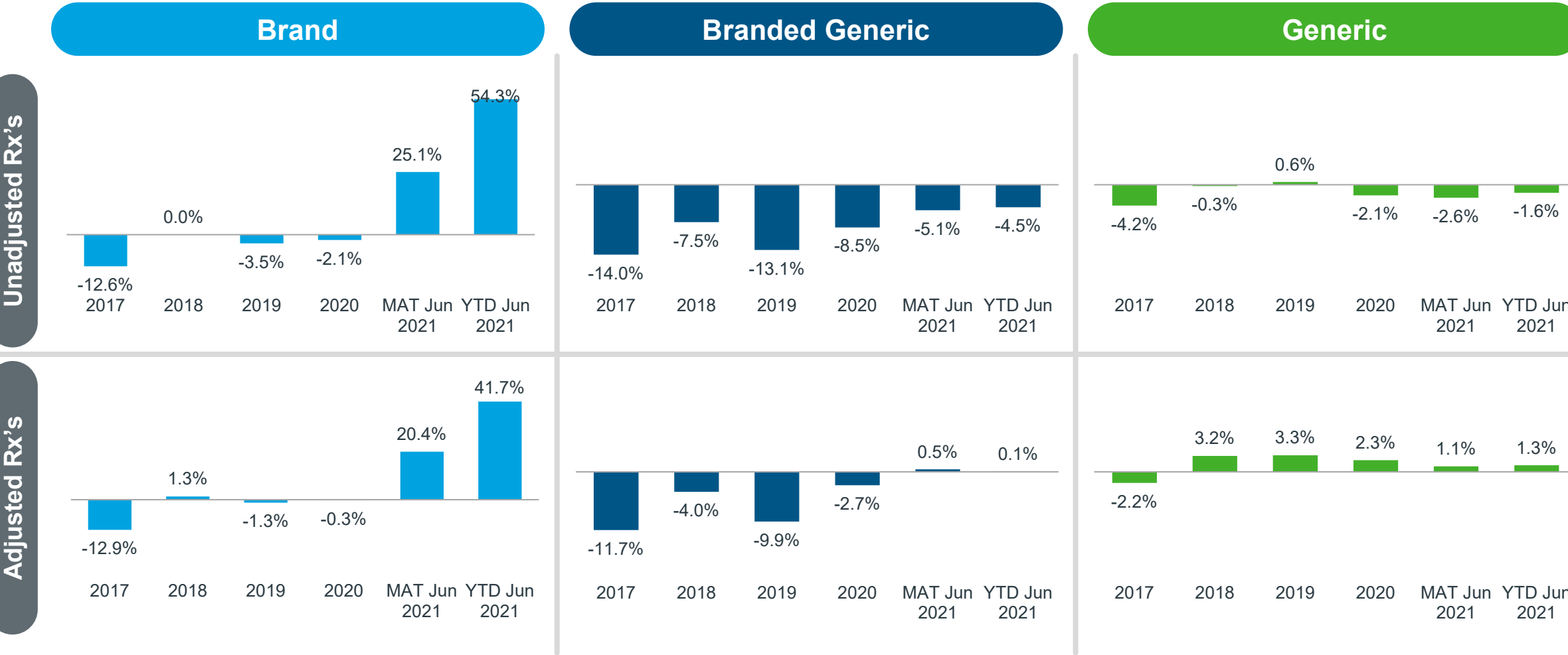
In his role at IQVIA Scott has worked with retailers, software vendors and other data suppliers where he has helped them to understand their performance in the market place through business reviews and market analysis.



# APPENDIX



# Brand Adjusted and Unadjusted Rx growth has exploded due to COVID vaccines

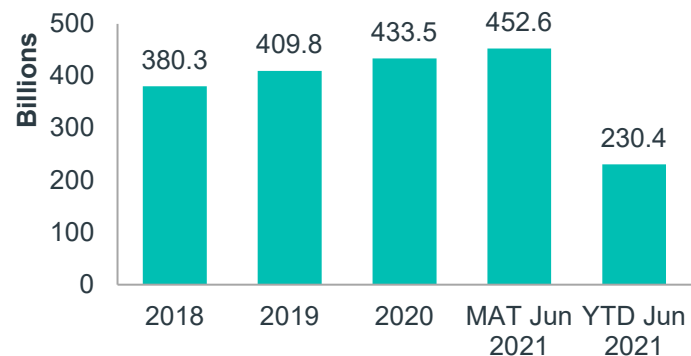


Source: IQVIA, Xponent®, April 2021  
Note: Limited to Rx and OTC Insulins; Includes Retail and Mail

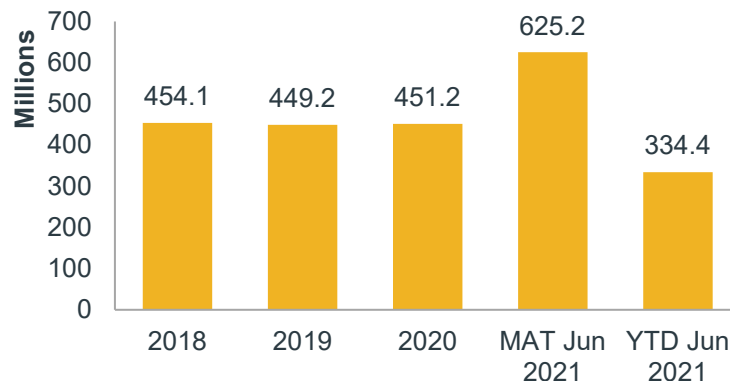
# COVID Vaccines drive Brand Rx volumes

Brand

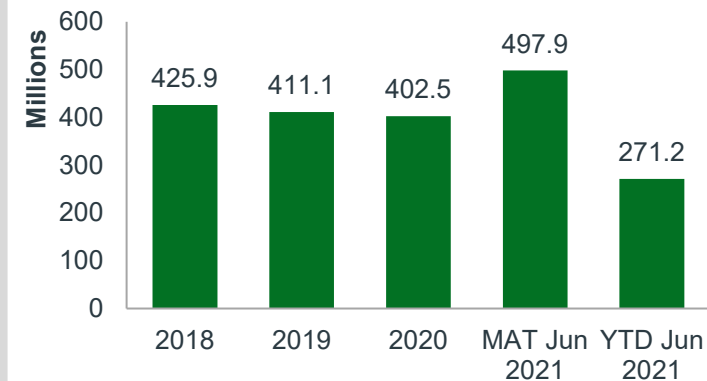
## Sales



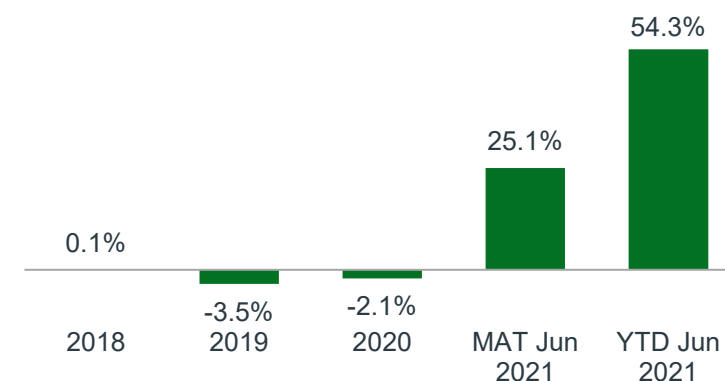
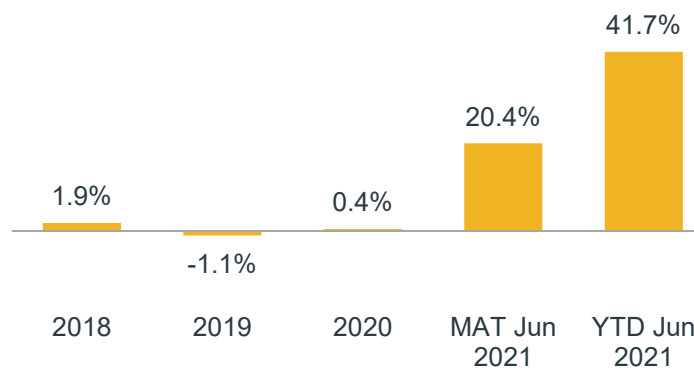
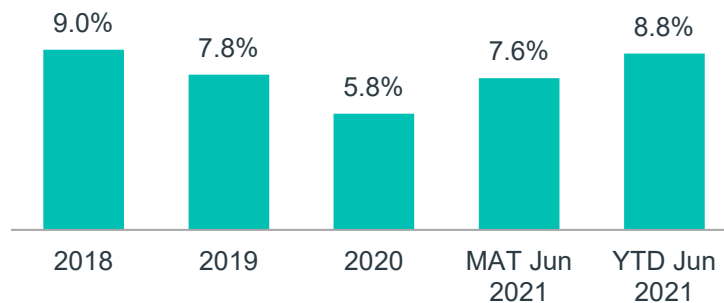
## Adjusted Rx's



## Unadjusted Rx's



## YoY Growth

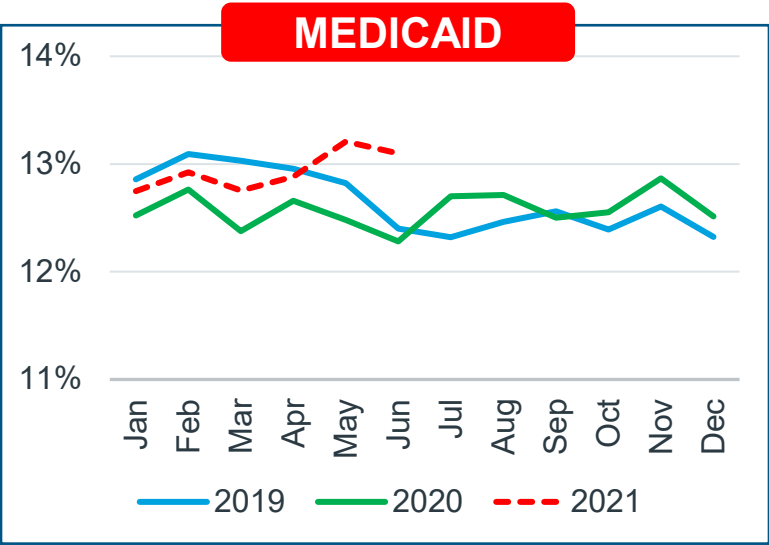
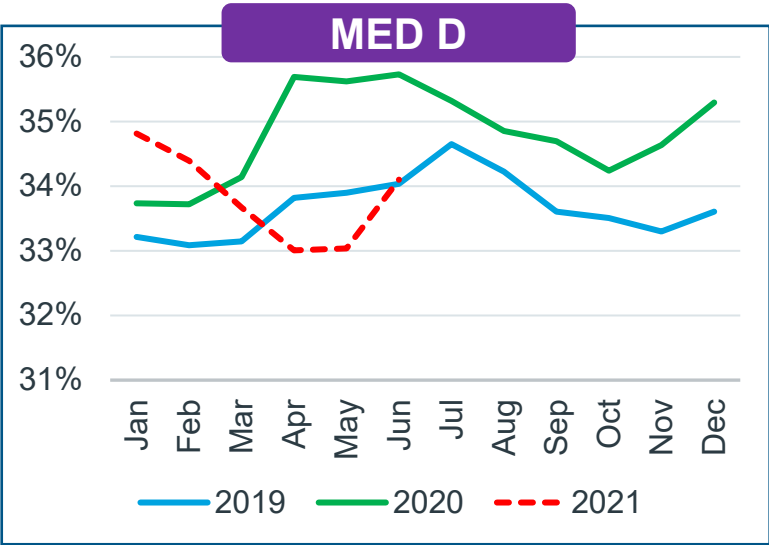
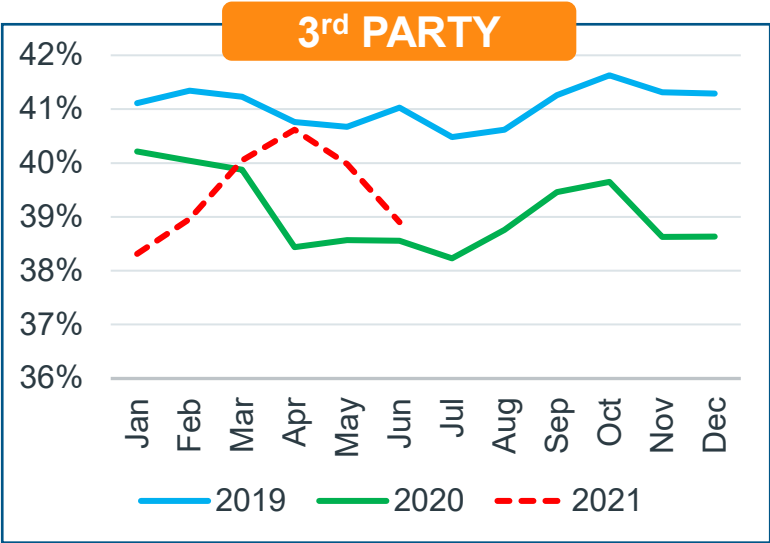
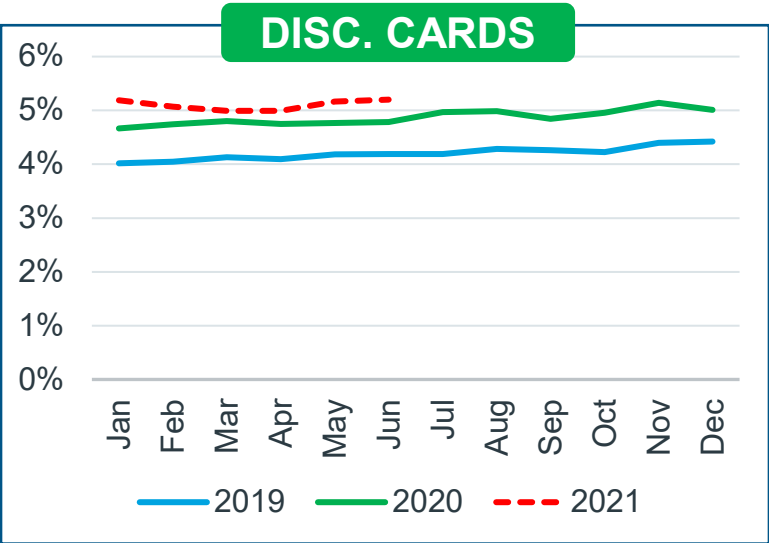
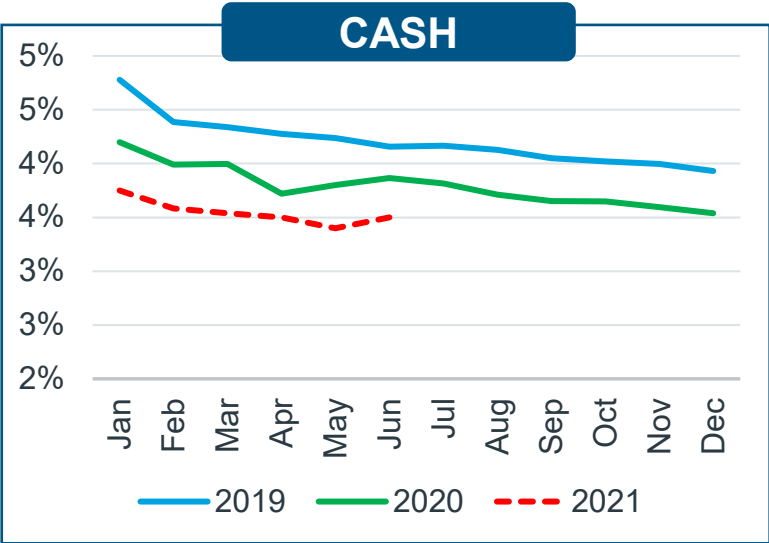


Source: IQVIA, National Sales Perspectives, August 2021, Xponent®

Note: Limited to Rx and OTC Insulins; Includes Retail, Non-Retail and Mail

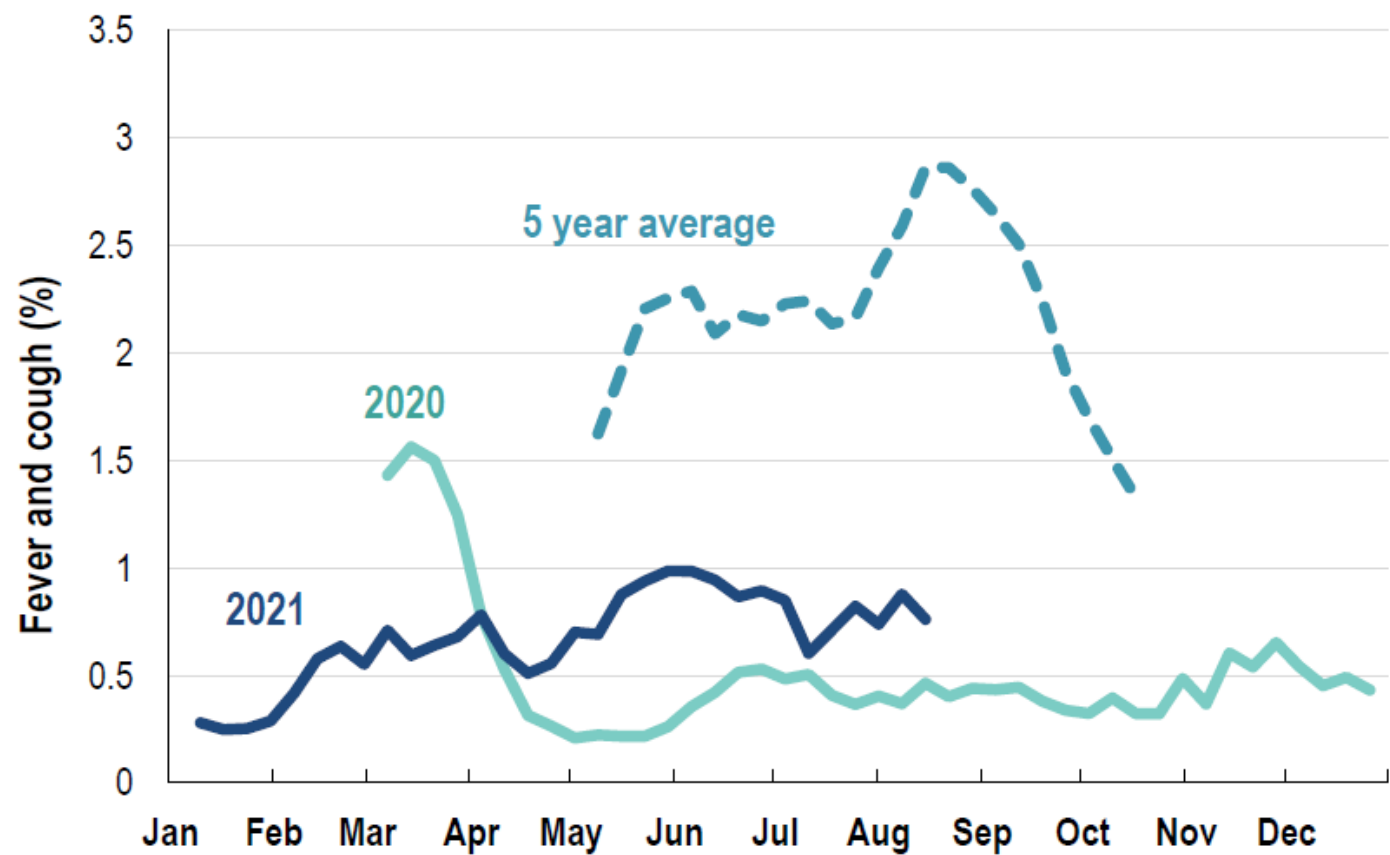
# Cash, Med D, and Discount Cards slightly increase; Third Party and Medicaid decrease

Market Share based on Adjusted Rx's



NOTE: Discount Cards are removed from 3rd Party

# The Flu season in Australia can be an early indicator of our season in the US and current trends are showing a weak season



<sup>\*</sup>5 year average is calculated using 2015, 2016, 2017, 2018 and 2019 data  
<sup>^</sup>Data are age standardised in this chart

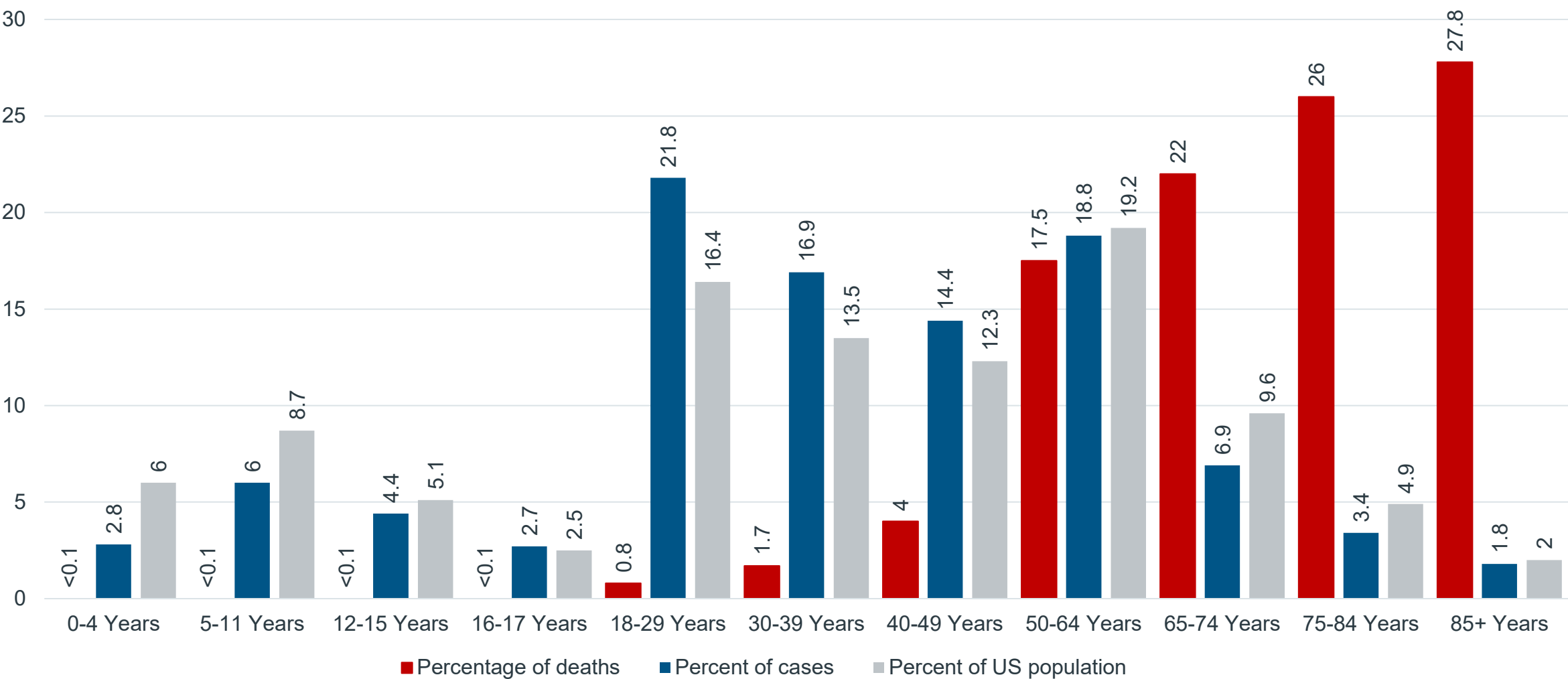
Data Source: <https://info.flutracking.net/reports-2/australia-reports/>

**71.5%** of  
Australians 18-65  
have received a flu  
vaccine, compared  
to **71.8%** at the  
same time last  
year

**90.4%** of  
Australians 65+  
have received a flu  
vaccine, compared  
to **90%** at the  
same time last  
year

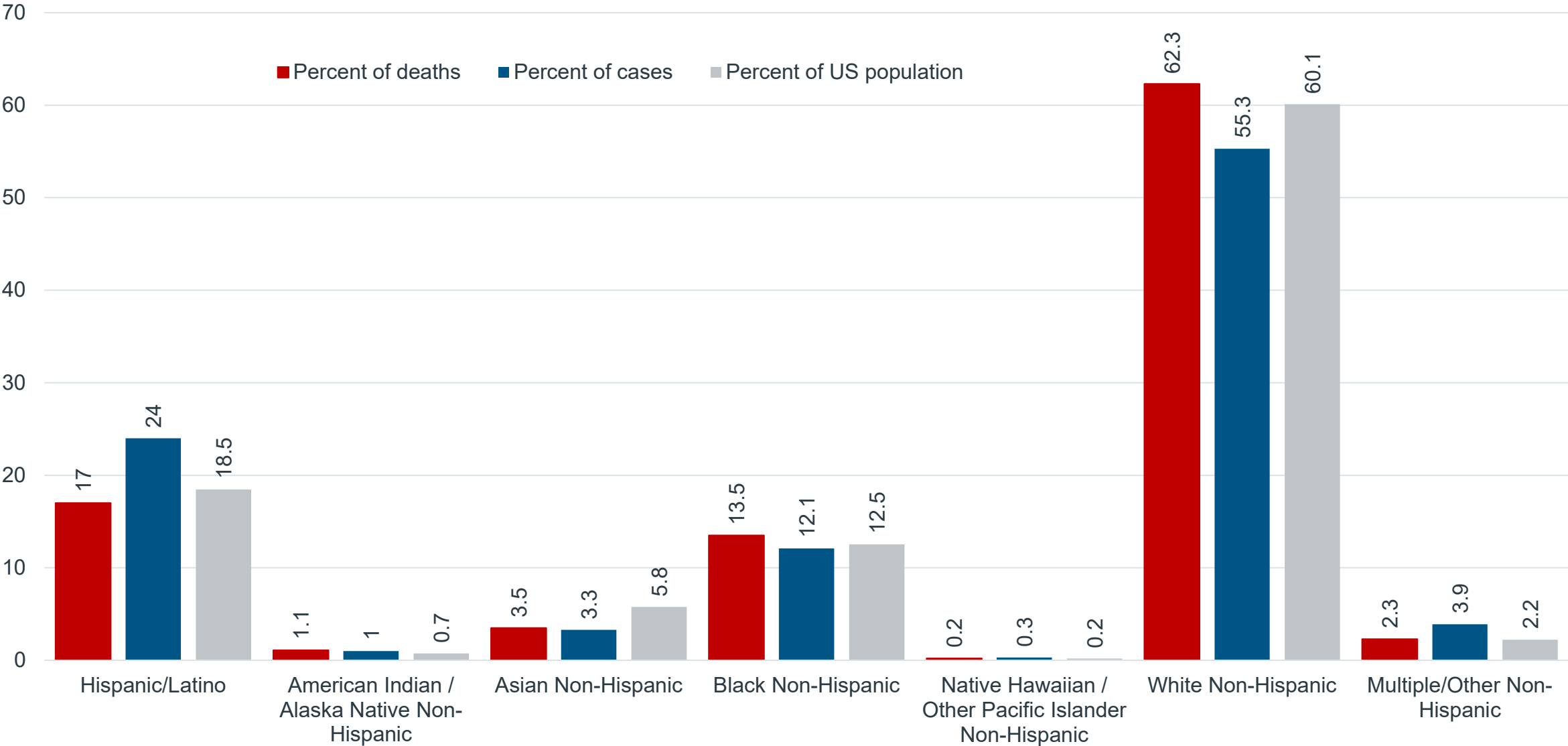
Data Source: <https://www.9news.com.au/national/influenza-vaccine-warning-as-number-of-aussies-seeking-flu-shot-falls-by-almost-half-from-2020/11e65b73-1283-4ef2-adaa-81bd67eb9ed5>

# 50 Years and Older age bracket comprises ~94% of COVID-19 deaths; 0-17 Years makes up fewer than 1% of COVID-19 deaths



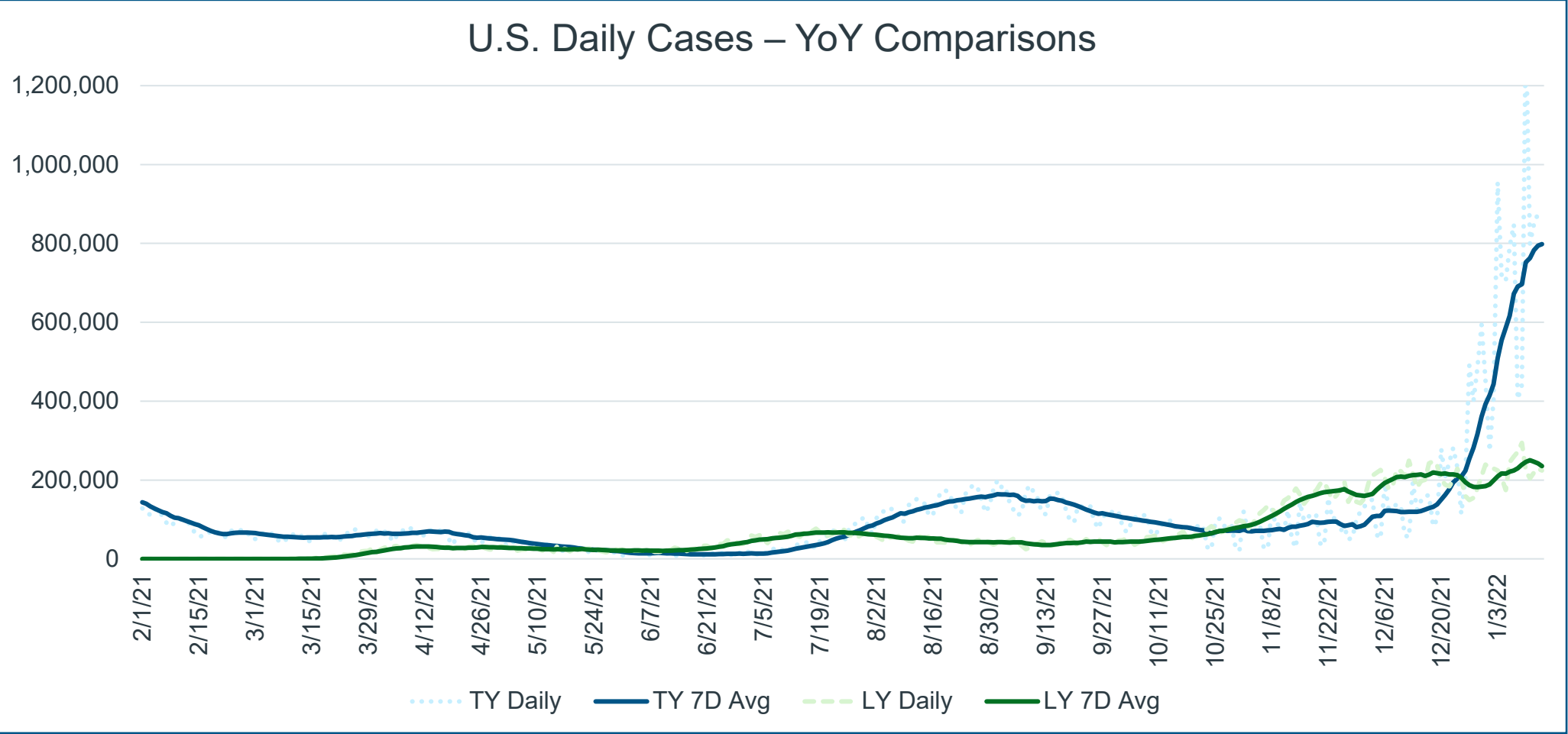
Data from 36,228,910 cases. Age group was available for 35,854,534 (98%) cases Data from 596,986 deaths. Age group was available for 596,918 (99%) deaths.. <https://covid.cdc.gov/covid-data-tracker/#demographics>

# Percentage of Cases, Deaths, and US Population by Ethnicity



Data from 33,819,971 cases. Age group was available for 98% of cases.  
Data from 559,459 deaths. Age group available for 99% of deaths. <https://covid.cdc.gov/covid-data-tracker/#demographics>

# COVID-19 cases are increasing



Source: [https://covid.cdc.gov/covid-data-tracker/#trends\\_dailytrendscases](https://covid.cdc.gov/covid-data-tracker/#trends_dailytrendscases) 2022



# Vaccine Hesitancy – Who are the unvaccinated?

*According to a Kaiser Family Foundation Poll conducted May 18-25, 2021:*



## AGE

The highest share of unvaccinated respondents were 30-49 years old (41%), followed by 29% ages 18-29 and 20% ages 50-64, while only 9% of those unvaccinated were 65 and older



## SOCIOECONOMIC STATUS

More likely to have lower education levels (46% attended only high school or less) and lower income levels (42% earn less than \$40,000 per year) than their vaccinated counterparts, who are nearly twice as likely to have earned a college degree or more



## POLITICAL PARTY AFFILIATION

Nearly half of unvaccinated respondents were Republicans (49% versus 29% Democrats), as opposed to 31% of vaccinated respondents who identified as Republicans and 59% Democrats



## RACIAL IDENTITY

Both unvaccinated and vaccinated respondents were disproportionately likely to be white (56% unvaccinated versus 64% vaccinated), based in the suburbs (56% unvaccinated versus 52% vaccinated) and have health insurance (76% unvaccinated versus 88% vaccinated).

[Here Are The Biggest Groups That Are Still Refusing The Covid-19 Vaccine, Poll Finds \(forbes.com\)](#) retrieved on August 10, 2021

# Race/Ethnicity of People Receiving a COVID-19 Vaccine in the U.S. as of August 2, 2021

KFF

Based on race/ethnicity data available for 57% of people who have received at least one vaccine dose

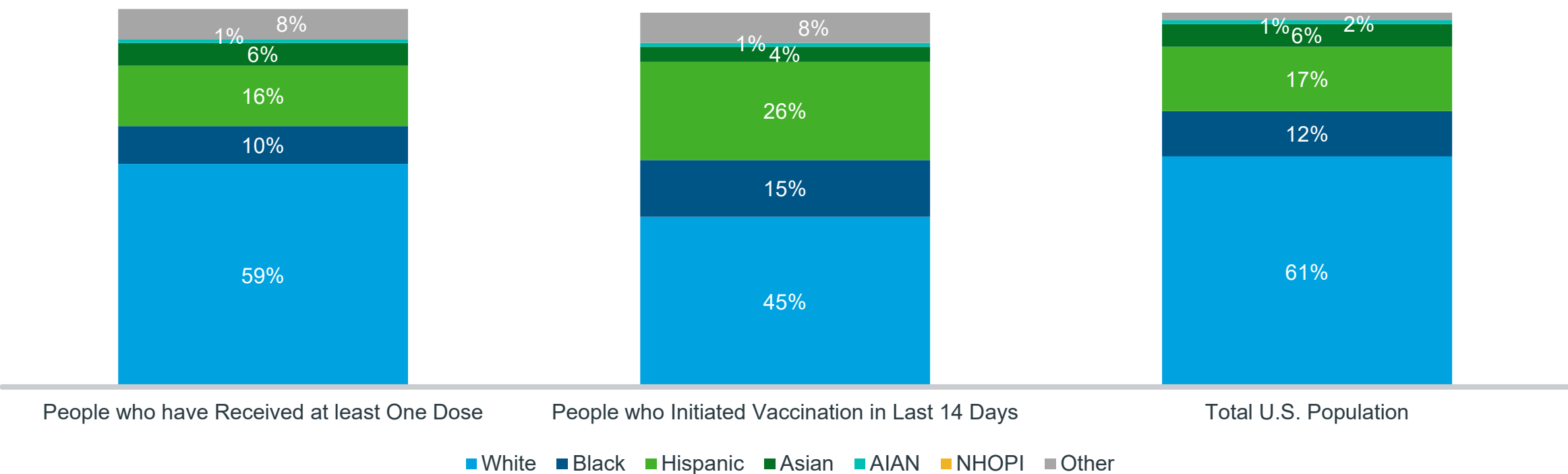
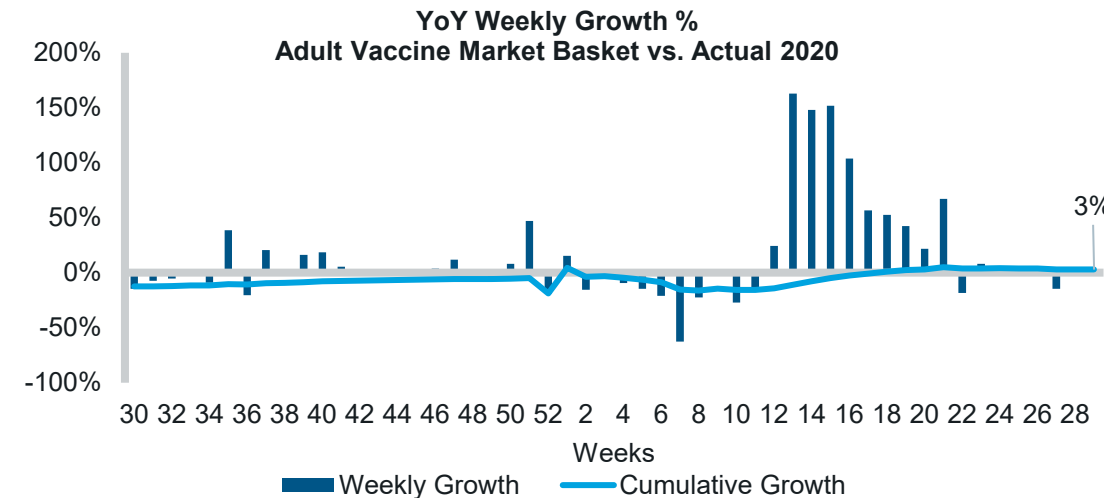
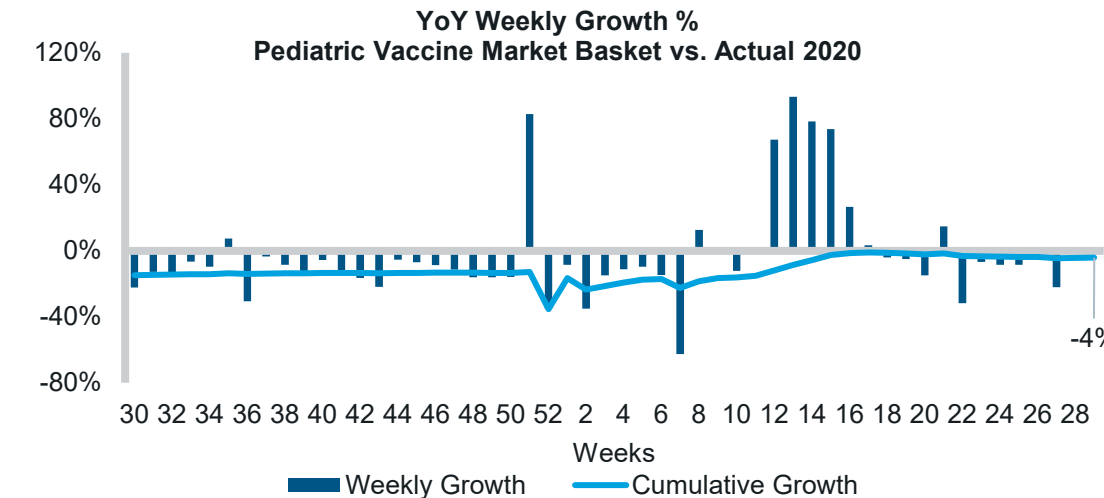
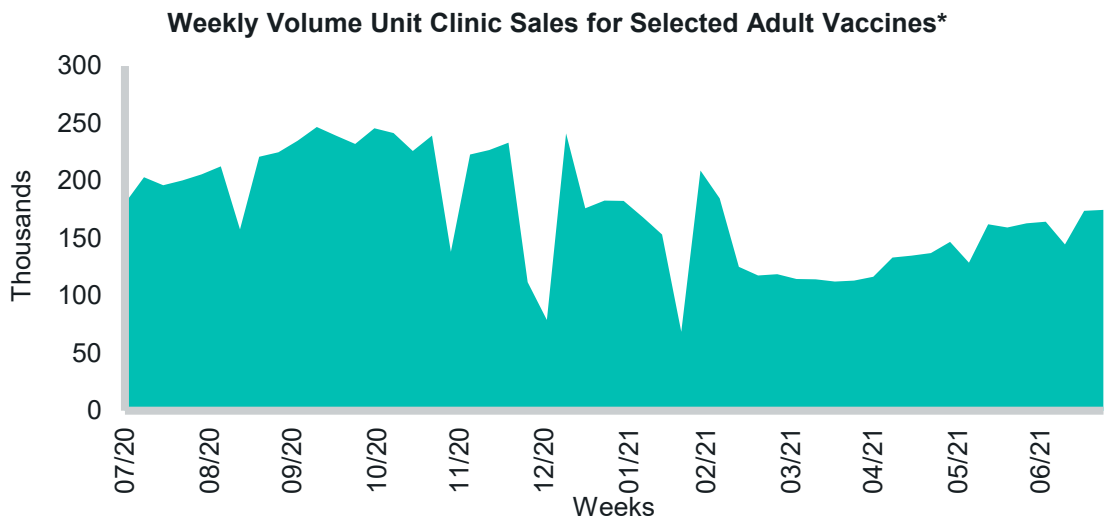
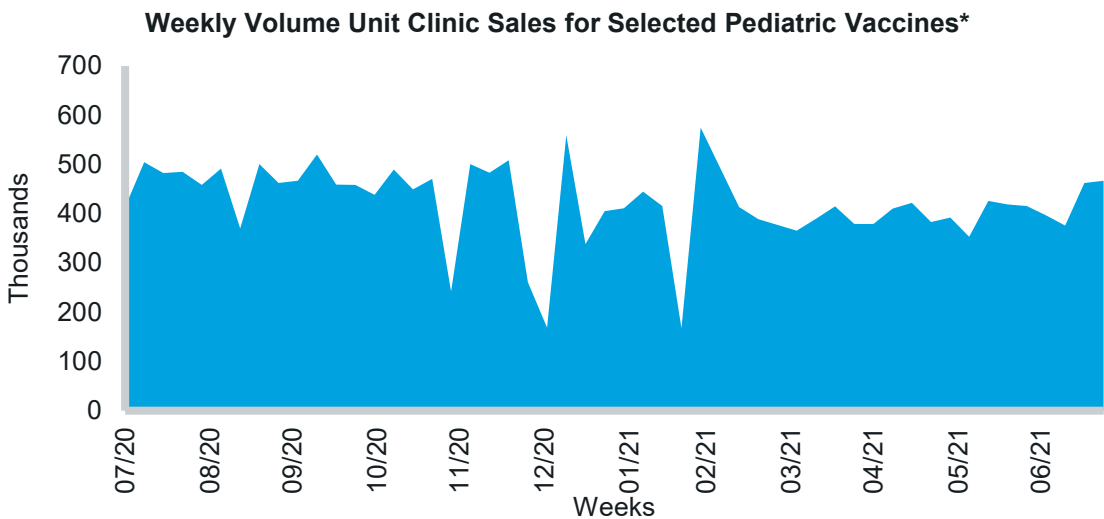


Figure 1: Race/Ethnicity of People Receiving a COVID-19 Vaccine in the U.S. as of August 2, 2021

**Note:** Totals may not sum to 100 due to rounding, Persons of Hispanic origin may be of any race but are categorized as Hispanic; other groups are non-Hispanic, Other race includes multiple race individuals  
**Source:** Centres for Disease Control and Prevention, Demographic Characteristics of People Receiving COVID-19 Vaccinations in the United States, data as of August 2, 2021, accessed August 3, 2021, <http://covid.cdc.gov/covid-data-tracker/#vaccination-demographic>; [Latest Data on COVID-19 Vaccinations by Race/Ethnicity | KFF](#) Retrieved on August 10, 2021

# Non-COVID weekly vaccine utilization is flat compared to 2020 after a period of accelerated activity that compensated for lockdown dips



Source: IQVIA Weekly Sales Perspectives (WSP), July 20 – July 21; Note: Data reflects sales to clinic channel as defined by IQVIA – No methodology has been applied to determine VACCINE USE BY AGE

# What factors will influence the rebound of the 86 million acute Rx's lost between 2019 and 2020?



## Positive Impacts – Increases in Rx's\*

- **Testing options** – better identification of cases = improvement in quarantine practices = reduction in overall COVID cases = increases in non-COVID Rx's
- **More elective surgeries** – increase in non-COVID Rx's (pain, anti-infectives)
- **More routine office visits** – increase in non-COVID Rx's (> Avg Rx per visit than telehealth)
- **Mask mandates lifted** – increases in cough/cold flu Rx's
- **Improved access to vaccine** – decrease in cases = return to normal life = overall increase in non-COVID Rx's
- **LTC** – shifting back to pre-COVID levels – increase in LTC (chronic and acute) Rx's



## Unknown Impacts – not certain how this will impact Rx's

- **Hand washing & hand sanitizer** – ingrained in daily lives = decrease in cough/cold/flu = decrease in Rx's *but* potentially leading to fewer COVID cases = increase in overall non-COVID Rx's
- **Return to school/work/travel/conventions/dining/entertainment** – could result in increases in cough/cold/flu cases and associated Rx's but could also increase COVID cases which could decrease non-COVID Rx's

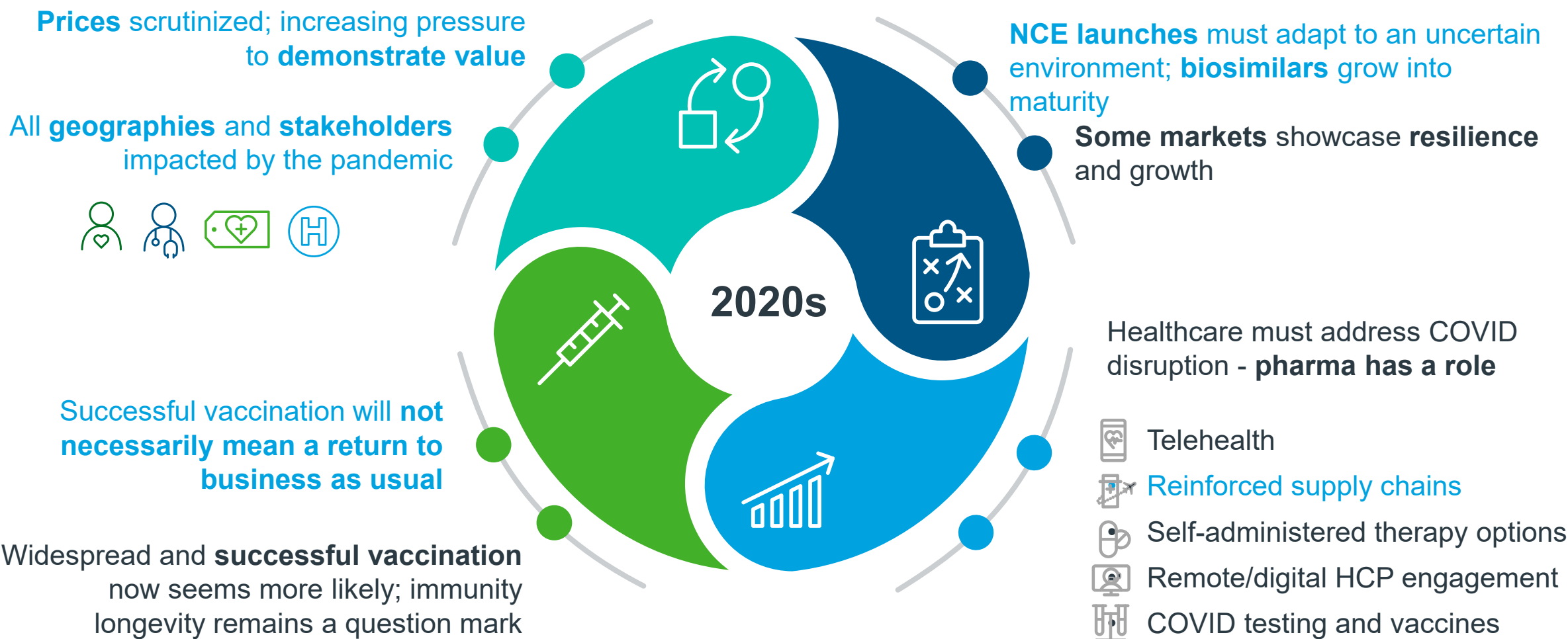


## Negative Impacts – Decreases in Rx's

- **Telemedicine** – plateauing but likely here to stay = fewer Rx's per visit than traditional in person visit
- **Flu vaccines** – will they match the historic numbers from last season? If so, could result in decreases in non-COVID/Cough/Cold Rx's

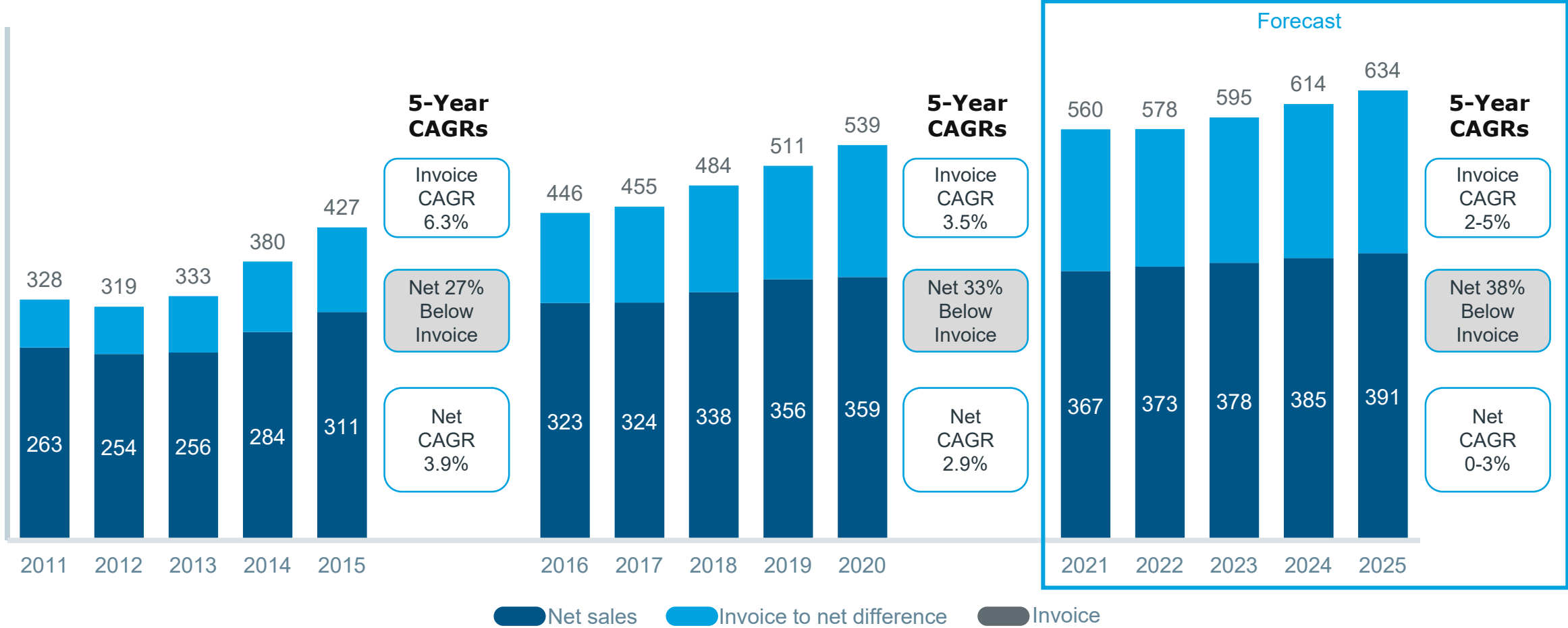
\*Assumption is that lower COVID cases = higher non-COVID/Cough/Cold Rx's (increased MD visits, more exposure to other illnesses).  
IQVIA – Confidential & Proprietary

# However, with the pandemic, new trends may define 2021—and beyond



# The U.S. spending forecast reflects an increasing gap between invoice level spending and manufacturer net revenues

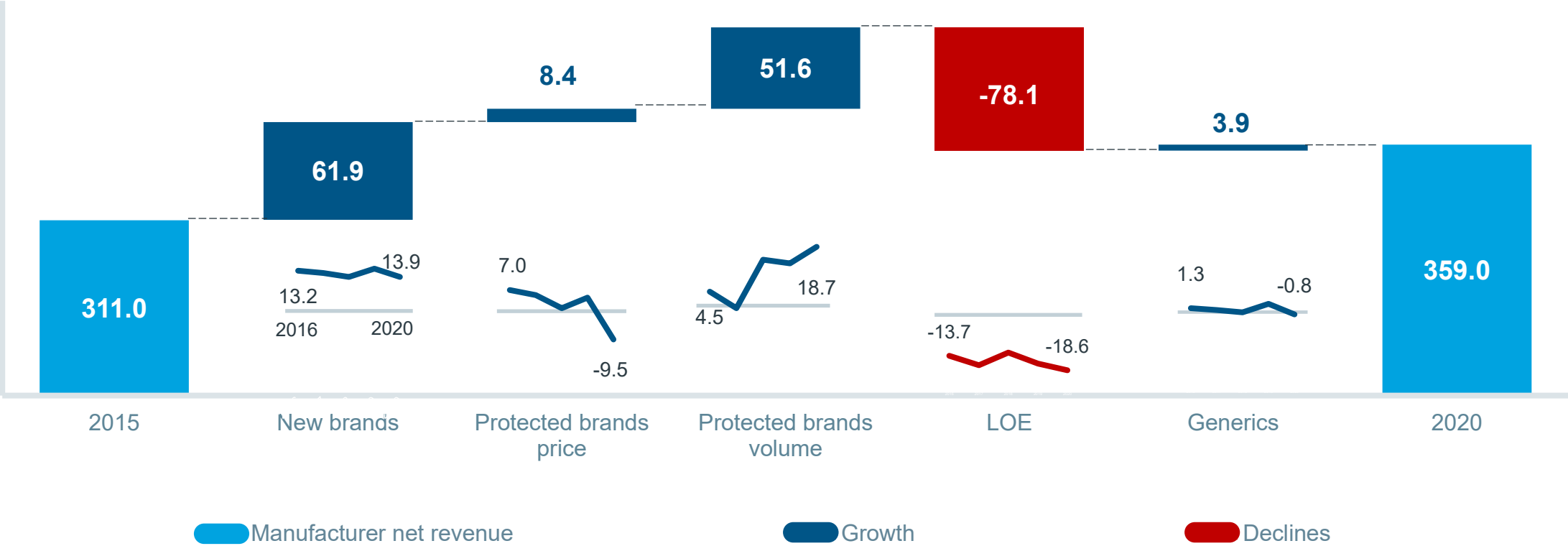
U.S. Medicine Spending and Growth at Invoice-level and Estimated Net 2011–2025



Source: IQVIA Institute, Feb 2021

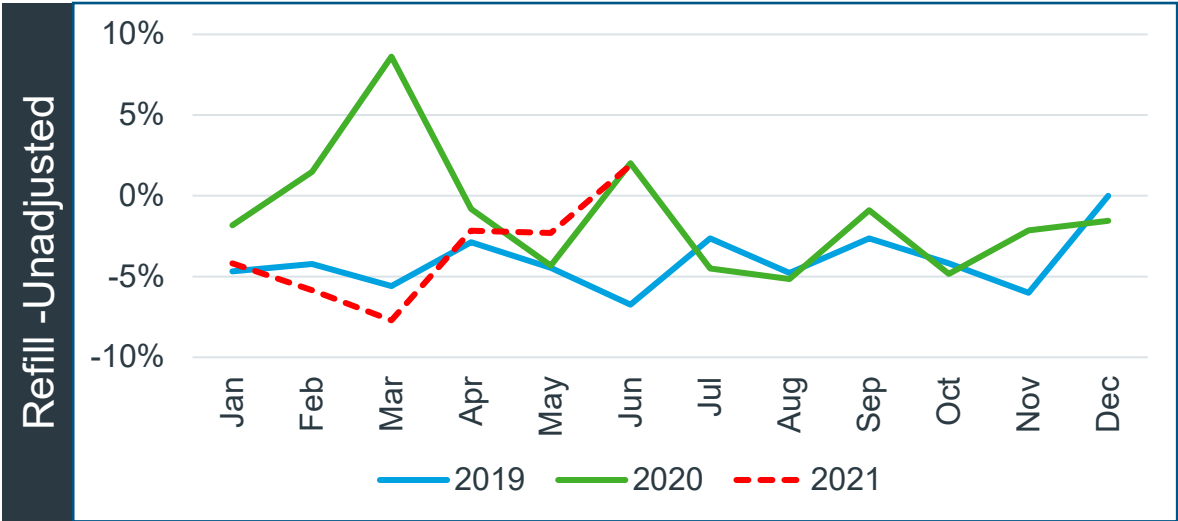
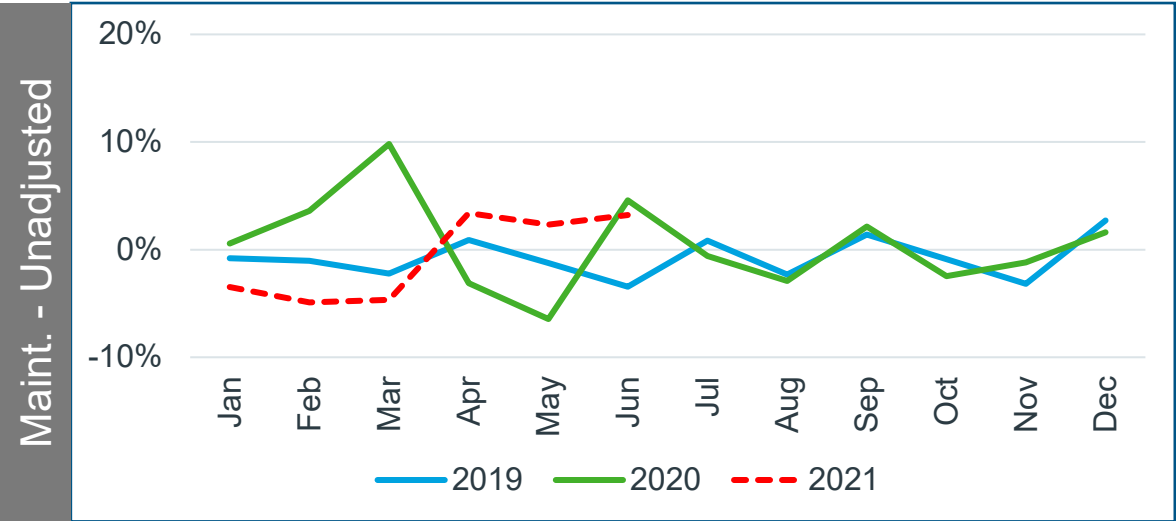
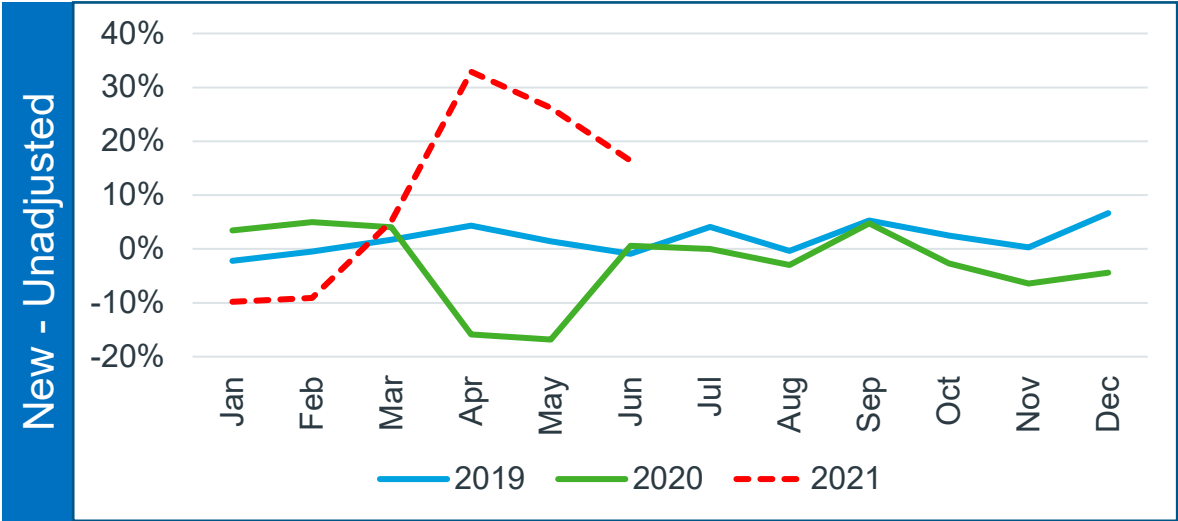
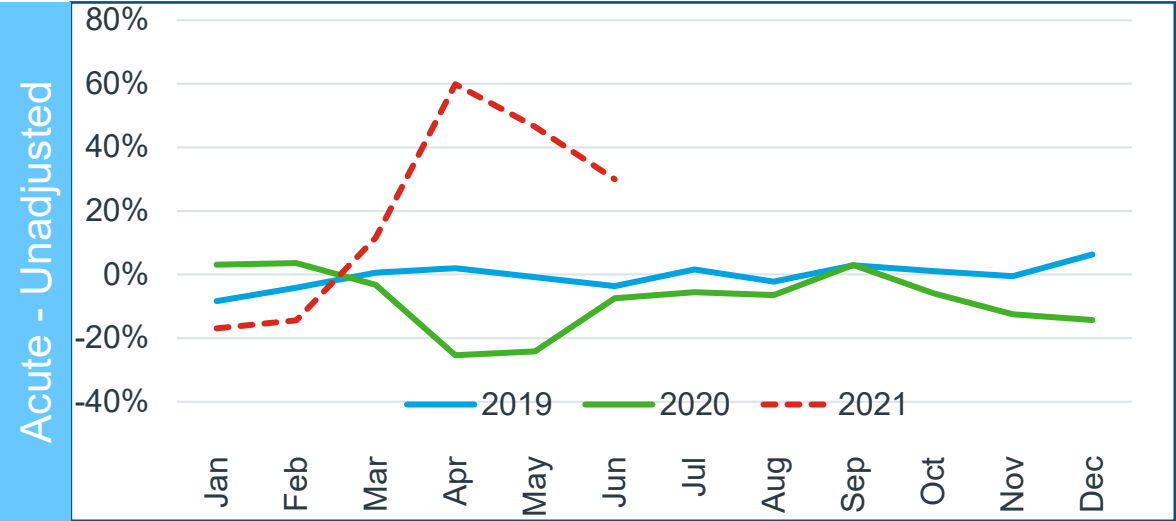
# Manufacturer net revenues increased by \$48 billion over the past five years primarily driven by new products and protected brand volume

Net Manufacturer Revenues and Growth 2015–2020, All Channels, US\$Bn



Source: IQVIA Institute, May 2021

# Acute and New Rx growth is slowing down over the last three months; driven by COVID vaccines (% change vs. 1 Year ago)



All Rx's shown in Millions





# For retail and mail channels (combined), specialty growth is outpacing traditional growth and now has ~42% share of total non-discounted spend

*In MAT November 2021, specialty spend increased 9.7% while traditional products grew 6.5%*



Share of Sales	2017	2018	2019	2020	MAT NOV 2021
SPECIALTY	36.3%	37.5%	39.6%	41.1%	41.7%
TRADITIONAL	63.7%	62.5%	60.4%	58.9%	58.3%

# Links to Headlines

Footnote	Slide Headline	Link to story
1	Rite Aid closing 60+ stores	<a href="https://www.cnn.com/2021/12/21/business/rite-aid-store-closures/index.html">https://www.cnn.com/2021/12/21/business/rite-aid-store-closures/index.html</a>
2	CVS closing 900 stores over 3 years	<a href="https://nypost.com/2021/11/18/cvs-closing-hundreds-of-its-drugstores-over-the-next-3-years/?utm_campaign=iphone_nyp&amp;utm_source=mail_app">https://nypost.com/2021/11/18/cvs-closing-hundreds-of-its-drugstores-over-the-next-3-years/?utm_campaign=iphone_nyp&amp;utm_source=mail_app</a>
3	Walgreens closing stores due to theft	<a href="https://www.foxbusiness.com/retail/walgreens-closing-san-francisco-stores-theft">https://www.foxbusiness.com/retail/walgreens-closing-san-francisco-stores-theft</a>
4	Stop & Shop closing 19 in-store pharmacies	<a href="https://www.patriotledger.com/story/news/2021/09/22/stop-shop-closing-19-store-pharmacies-citing-low-reimbursement-norwell-cohasset-close/5803363001/">https://www.patriotledger.com/story/news/2021/09/22/stop-shop-closing-19-store-pharmacies-citing-low-reimbursement-norwell-cohasset-close/5803363001/</a>
5	Intermountain closing 25 retail pharmacies	<a href="https://www.sltrib.com/news/2021/07/13/intermountain-is-closing/">https://www.sltrib.com/news/2021/07/13/intermountain-is-closing/</a>
6	Wakefern closing 62 ShopRite pharmacies	<a href="https://www.grocerydive.com/news/wakefern-to-close-62-shoprite-pharmacies-amid-stifling-competition/593982/?utm_source=Sailthru&amp;utm_medium=email&amp;utm_campaign=Issue:%202021-01-26%20Grocery%20Dive%20%5Bissue:32081%5D&amp;utm_term=Grocery%20Dive">https://www.grocerydive.com/news/wakefern-to-close-62-shoprite-pharmacies-amid-stifling-competition/593982/?utm_source=Sailthru&amp;utm_medium=email&amp;utm_campaign=Issue:%202021-01-26%20Grocery%20Dive%20%5Bissue:32081%5D&amp;utm_term=Grocery%20Dive</a>
7	Price Chopper and Tops Markets merged	<a href="https://www.supermarketnews.com/retail-financial/price-choppermarket-32-and-tops-markets-complete-merger">https://www.supermarketnews.com/retail-financial/price-choppermarket-32-and-tops-markets-complete-merger</a>
8	Brookshire Grocery acquired Reasors	<a href="https://www.supermarketnews.com/retail-financial/brookshire-grocery-co-acquire-reasor-s">https://www.supermarketnews.com/retail-financial/brookshire-grocery-co-acquire-reasor-s</a>
9	Raley's acquired Bashas'	<a href="https://progressivegrocer.com/bashas-be-acquired-raleys">https://progressivegrocer.com/bashas-be-acquired-raleys</a>

Footnote	Slide Headline	Link to story
10	BiMart sells pharmacy business to Walgreens	<a href="https://news.walgreens.com/press-center/employee-owned-bi-mart-to-exit-pharmacy-business-and-transition-pharmacy-services-to-walgreens.htm">https://news.walgreens.com/press-center/employee-owned-bi-mart-to-exit-pharmacy-business-and-transition-pharmacy-services-to-walgreens.htm</a>
11	BioMatrix acquires Infucare	<a href="https://www.hmenews.com/article/biomatrix-acquires-infucare">https://www.hmenews.com/article/biomatrix-acquires-infucare</a>
12	Ro's acquires Modern Fertility	<a href="https://www.fastcompany.com/90638496/ro-modern-fertility-acquisition-womens-health">https://www.fastcompany.com/90638496/ro-modern-fertility-acquisition-womens-health</a>
13	TDS acquired by Private Equity Firm	<a href="https://www.businesswire.com/news/home/20210517005101/en/Transaction-Data-Systems-Announces-Acquisition-by-BlackRock-Long-Term-Private-Capital-from-GTCR">https://www.businesswire.com/news/home/20210517005101/en/Transaction-Data-Systems-Announces-Acquisition-by-BlackRock-Long-Term-Private-Capital-from-GTCR</a>
14	Optum acquires Change Healthcare	<a href="https://www.fiercehealthcare.com/tech/unitedhealth-group-s-optum-to-buy-change-healthcare-for-nearly-8b">https://www.fiercehealthcare.com/tech/unitedhealth-group-s-optum-to-buy-change-healthcare-for-nearly-8b</a>
15	Centene acquired Magellan Health	<a href="https://www.prnewswire.com/news-releases/centene-signs-definitive-agreement-to-acquire-magellan-health-301200111.html">https://www.prnewswire.com/news-releases/centene-signs-definitive-agreement-to-acquire-magellan-health-301200111.html</a>
16	Rite Aid purchased Bartells	<a href="https://www.chaindrugreview.com/rite-aid-to-acquire-bartell-drugs/">https://www.chaindrugreview.com/rite-aid-to-acquire-bartell-drugs/</a>
17	Centene acquires Pantherx	<a href="https://www.prnewswire.com/news-releases/centene-signs-definitive-agreement-to-acquire-pantherx-rare-pharmacy-pantherx-301192725.html">https://www.prnewswire.com/news-releases/centene-signs-definitive-agreement-to-acquire-pantherx-rare-pharmacy-pantherx-301192725.html</a>

# IQVIA Definition of a Specialty Drug

Specialty drugs at IQVIA where are classified as products that meet the following criteria:

- Treats chronic, rare and/or complex diseases
- Initiated and maintained by a specialist
- Generally injectable and/or not self-administered
- Products that require an additional level of care in their chain of custody
- Expensive (USD \$6K annual cost of therapy)
- Unique distribution
- Requires extensive or in-depth monitoring/patient counseling. Requires reimbursement assistance

# Cancer and Immunology are the top Specialty therapy areas across all COTs

CHAIN	INDEPENDENT	FOOD	MASS
CANCER DETOX AG, ANTI-NAUSEANTS	CANCER DETOX AG, ANTI-NAUSEANTS	CANCER DETOX AG, ANTI-NAUSEANTS	CANCER DETOX AG, ANTI-NAUSEANTS
ONCOLOGICS	OTHER CARDIOVASCULARS	ONCOLOGICS	ONCOLOGICS
HIV ANTIVIRALS	HIV ANTIVIRALS	OTHER CARDIOVASCULARS	OTHER CARDIOVASCULARS
IMMUNOSUPPRESSANTS	ONCOLOGICS	IMMUNOSUPPRESSANTS	IMMUNOSUPPRESSANTS
LIPID REGULATORS	IMMUNOSUPPRESSANTS	HIV ANTIVIRALS	HIV ANTIVIRALS
IMMUNOLOGY	MENTAL HEALTH	LIPID REGULATORS	IMMUNOLOGY
OTHER CARDIOVASCULARS	IMMUNOLOGY	IMMUNOLOGY	LIPID REGULATORS
ANTI-INFLAMMATORY AND DIGESTIVE ENZYMES AND MODULA	ANTI-INFLAMMATORY AND DIGESTIVE ENZYMES AND MODULA	ANTI-INFLAMMATORY AND DIGESTIVE ENZYMES AND MODULA	ANTI-INFLAMMATORY AND DIGESTIVE ENZYMES AND MODULA
MENTAL HEALTH	LIPID REGULATORS	MENTAL HEALTH	MENTAL HEALTH
THYROID ANTI-THYROID AND IODINE PREPS	SEX HORMONES (ANDROGENS, OESTROGENS, PROGESTOGENS,	VIRAL HEPATITIS	VIRAL HEPATITIS

# The top specialty products across retail are similar

CHAIN	INDEPENDENT	FOOD	MASS
ONDANSETRON ODT	SILDENAFIL CIT	ONDANSETRON ODT	ONDANSETRON ODT
ONDANSETRON HCL	ONDANSETRON ODT	ONDANSETRON HCL	ONDANSETRON HCL
ANASTROZOLE	ONDANSETRON HCL	ANASTROZOLE	SILDENAFIL CIT
LETROZOLE	ANASTROZOLE	SILDENAFIL CIT	ANASTROZOLE
BIKTARVY	BIKTARVY	LETROZOLE	LETROZOLE
TACROLIMUS	TACROLIMUS	MYCOPHENOLATE MOF	MYCOPHENOLATE MOF
MYCOPHENOLATE MOF	LETROZOLE	TACROLIMUS	TACROLIMUS
SILDENAFIL CIT	MYCOPHENOLATE MOF	FLUOROURACIL	LEFLUNOMIDE
REPATHA SURECLICK	DESCOVY	REPATHA SURECLICK	REPATHA SURECLICK
DESCOVY	PROLIA	LEFLUNOMIDE	METHOTREXATE SOD

One that stands out is Biktarvy is #5 at Chain and Independents but not present in the top 10 for Food and Mass