

Health Care Position Monitor

For Week of August 15, 2022

Best Ideas - Longs					Best Ideas - Shorts						
LONG					SHORT						
		Price	Mkt Cap (\$B)	Trend	Tail			Price	Mkt Cap (\$B)	Trend	Tail
Active Longs					Active Shorts						
ACHC	Acadia Healthcare Company, Inc.	\$ 82.63	\$7.5B	✓	✓	XLV	Health Care Select Sector SPDR Fund	\$ 134.29	\$40.3B	×	×
HCA	HCA Healthcare Inc	\$ 216.70	\$62.2B	✓	✓	ARKG	ARK Genomic Revolution ETF	\$ 42.39	\$3.2B	×	×
BDX	Becton, Dickinson and Company	\$ 266.81	\$76.1B	✓	✓	TXG	10x Genomics Inc Class A	\$ 47.58	\$4.5B	×	×
BAX	Baxter International Inc.	\$ 62.02	\$31.2B	✓	✓	AMN	AMN Healthcare Services, Inc.	\$ 112.11	\$5.0B	×	×
						TDOC	Teladoc Health, Inc.	\$ 40.93	\$6.6B	×	×
						EYE	National Vision Holdings, Inc.	\$ 35.62	\$2.9B	×	×
						EXAS	Exact Sciences Corporation	\$ 44.24	\$7.8B	×	×
Long Bias					Short Bias						
						XHE	SPDR S&P Health Care Equipment ETF	\$ 104.05	\$0.5B		
						XHS	SPDR S&P Health Care Services ETF	\$ 102.36	\$0.1B		
						XBI	SPDR S&P BIOTECH ETF	\$ 94.90	\$8.8B		
						PINK	Simplify Health Care ETF	\$ 26.39	\$0.0B		
PGNY	Progyny, Inc.	\$ 46.08	\$4.2B			LFST	Lifescance Health Group, Inc.	\$ 7.88	\$2.9B		
PRVA	Privia Health Group, Inc.	\$ 36.33	\$3.9B			DGX	Quest Diagnostics Incorporated	\$ 141.10	\$16.5B		
TFX	Teleflex Incorporated	\$ 254.65	\$11.9B			CYH	Community Health Systems, Inc.	\$ 3.48	\$0.5B		
HOLX	Hologic, Inc.	\$ 73.47	\$18.3B			NTRA	Natera, Inc.	\$ 56.68	\$5.5B		
DOCS	Doximity, Inc. Class A	\$ 36.96	\$4.1B								
DRIO	DarioHealth Corp.	\$ 6.74	\$0.2B								
ATIP	ATI Physical Therapy, Inc. Class A	\$ 0.95	\$0.2B								

Note

Best Idea Longs/Shorts are high conviction ideas that we've either presented a Black Book for already or have one in the works (similar to other Hedgeye teams). Bias Ideas are ones in which we've done the bulk of the work, but there may be another question we need to answer to move it over the line. All active positions are higher conviction than bias ideas. We rank active versus active and bias versus bias.

Disclaimer

Hedgeye's "bias" represents Hedgeye's outlook on companies currently under Hedgeye's review, or for which timing is not right for greater coverage. Hedgeye may or may not provide further commentary on any or all companies represented on the bias and representation of a company on the bias does not forecast whether Hedgeye will or will not issue any additional material on that company.

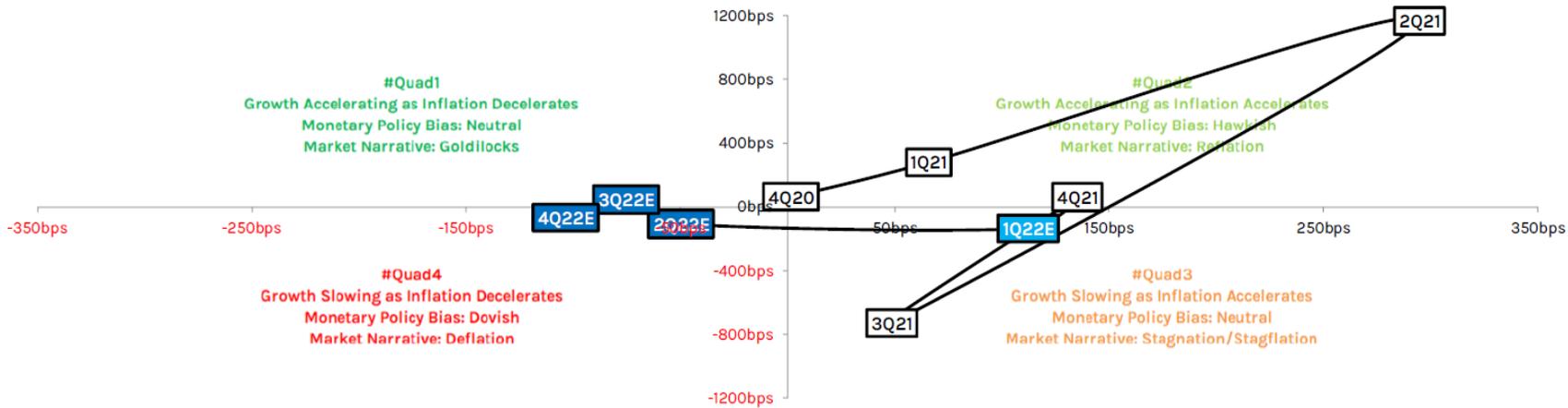
Hedgeye Macro Quad Outlook

Hedgeye Quad Model

United States	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21	← Actuals Estimates →	1Q22E	2Q22E	3Q22E	4Q22E
Real GDP QoQ SAAR	2.40%	3.20%	2.80%	1.90%	-5.10%	-31.20%	33.80%	4.50%	6.30%	6.70%	2.30%	7.00%	Real GDP QoQ SAAR	0.99%	2.43%	4.08%	4.22%
Real GDP YoY	2.15%	2.11%	2.32%	2.57%	0.63%	-9.08%	-2.89%	-2.26%	0.55%	12.23%	4.95%	5.56%	Real GDP YoY	4.22%	3.16%	3.62%	2.96%
2yr Comparative Base Effects	2.45%	2.72%	2.66%	2.52%	2.58%	2.70%	2.69%	2.45%	1.39%	-3.49%	-0.28%	0.15%	2yr Comparative Base Effects	0.99%	1.57%	1.03%	1.65%
Headline CPI YoY	1.64%	1.81%	1.76%	2.03%	2.12%	0.36%	1.22%	1.24%	1.90%	4.85%	5.34%	6.69%	Headline CPI YoY	7.81%	7.32%	6.56%	5.53%
2yr Comparative Base Effects	2.38%	2.31%	2.30%	2.16%	1.93%	2.26%	2.20%	2.12%	1.88%	1.09%	1.49%	1.64%	2yr Comparative Base Effects	2.01%	2.61%	3.28%	3.96%

United States

→ x-axis: First Difference of YoY Headline CPI;
y-axis: First Difference of YoY Real GDP



Data Source: Bloomberg. Light Blue box = Hedgeye Nowcast Model estimate. Dark Blue boxes = Hedgeye Comparative Base Effects Model estimates.

© Hedgeye Risk Management

Health Care Preferred in #Quad4

Macro Quads are useful in guiding long and short and factor exposures including Sector weighting. However, at the stock level, the Macro Quads do not differentiate between tickers.

Favorable Quad 4 Factors

Quad 4: Deflation

Best Asset Classes:

Fixed Income, Gold, USD

Worst Asset Classes:

Commodities, Equities, Credit, FX

Best Equity Sectors:

Consumer Staples, Utilities, REITS, Health Care, Telecom

Worst Equity Sectors:

Energy, Tech, Industrials, Financials, Materials

Best Equity Style Factors:

Low Beta, Dividend Yield, Quality, Defensives, Value

Worst Equity Style Factors:

High Beta, Momentum, Leverage, Secular Growth, Cyclical Growth

Best Fixed Income Sectors:

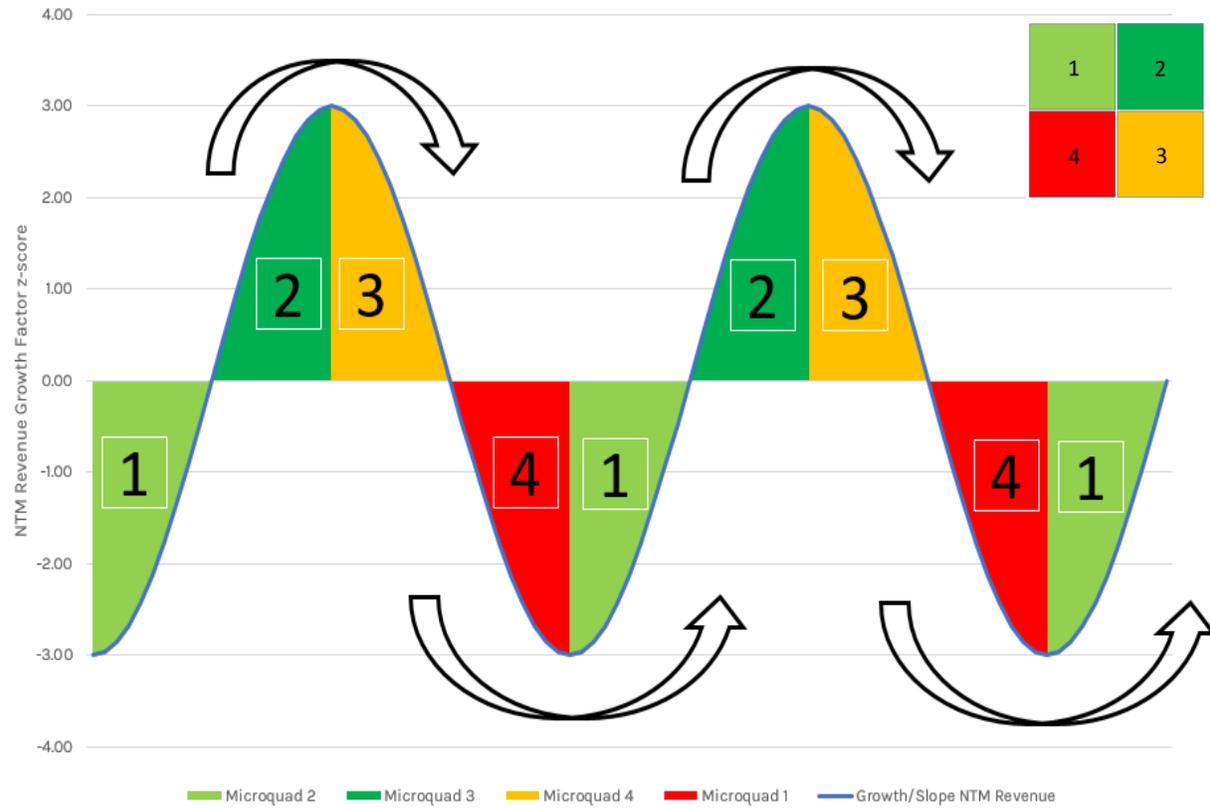
Long Bond, Treasury Belly, IG Credit, Munis, MBS

Worst Fixed Income Sectors:

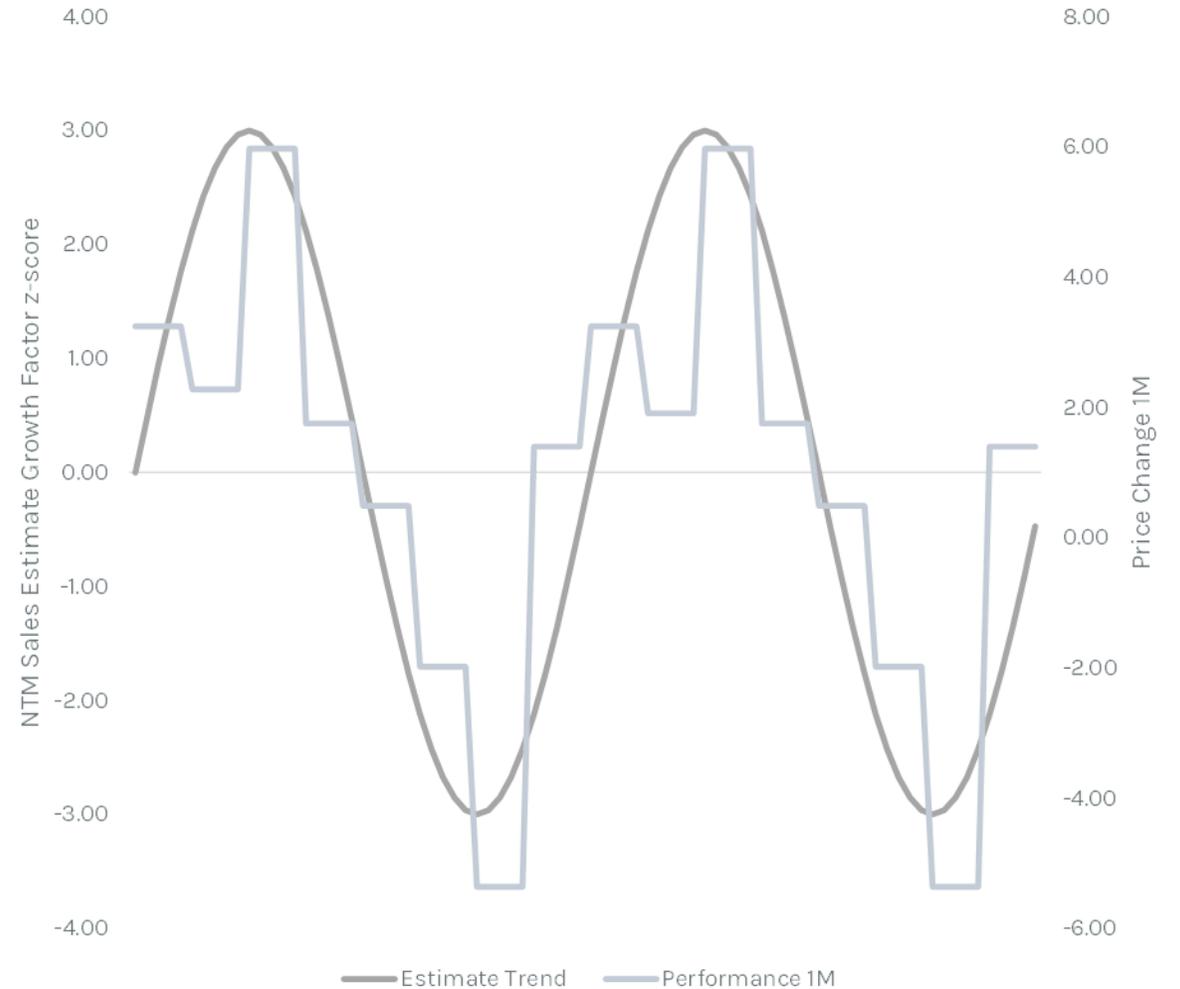
Preferreds, EM Local Currency, BDCs, Leveraged Loans, TIPS

Micro Quad | Model vs Backtest

MicroQuad – Generic Growth Curve Progression



Historical 1M Performance vs MicroQuad Curve



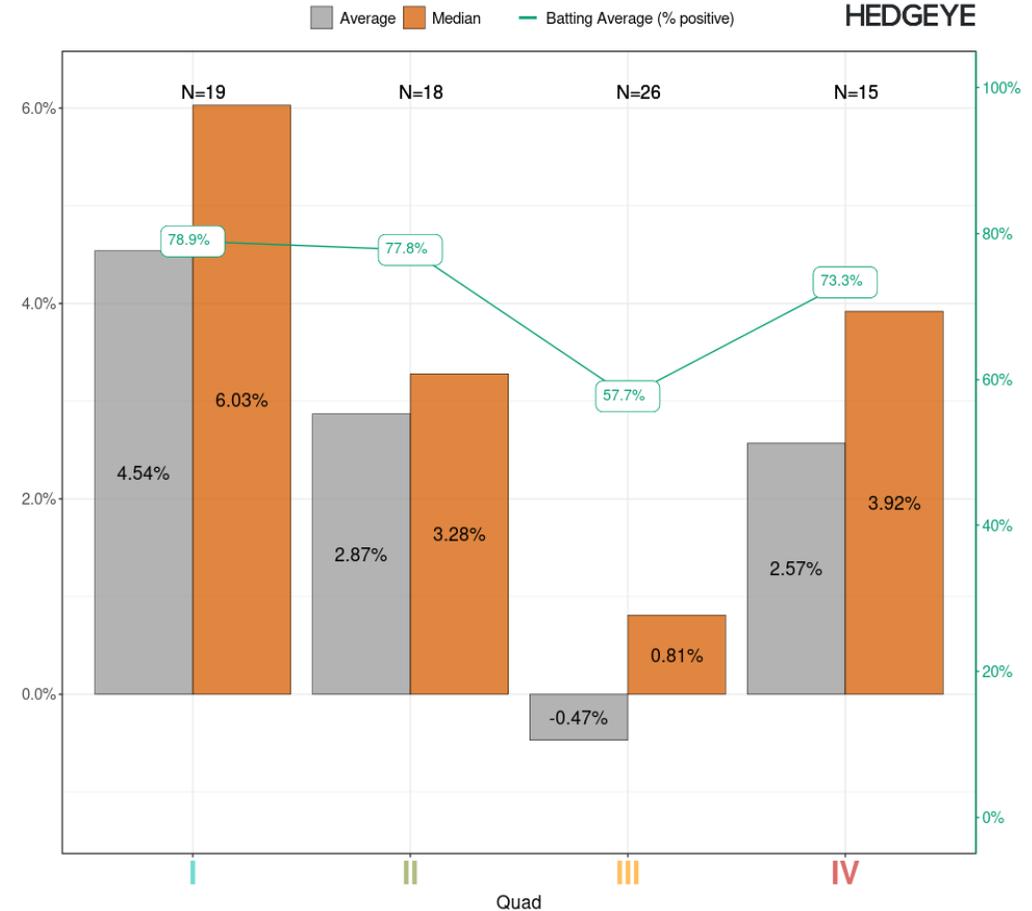
Health Care Macro Utilization Data Outperforms in Quad 4

Personal Consumption Expenditure agrees with the XLV back test

Table 2.4.3U. Real Personal Consumption Expenditures by Type of Product, Quantity Indexes	Macro Quad			
	1	2	3	4
Health care	2.7%	2.6%	3.1%	3.2%
Outpatient services	2.9%	3.1%	3.7%	3.6%
Physician services (44)	3.3%	3.5%	4.5%	3.9%
Dental services (45)	0.4%	1.1%	1.3%	1.6%
Paramedical services (46)	3.3%	3.4%	3.5%	4.0%
Home health care	3.2%	2.3%	3.1%	3.4%
Medical laboratories	5.3%	4.7%	5.2%	6.9%
Other professional medical services	3.3%	3.8%	3.5%	3.9%
Specialty outpatient care facilities and health and allied services	3.4%	3.5%	3.6%	3.9%
All other professional medical services	3.3%	4.3%	3.3%	4.2%
Hospital and nursing home services	2.5%	2.2%	2.6%	2.8%
Hospitals (51)	2.7%	2.5%	2.8%	3.3%
Nonprofit hospitals' services to households	2.9%	2.6%	3.0%	3.2%
Proprietary hospitals	3.1%	1.4%	3.1%	3.5%
Government hospitals	1.8%	2.5%	2.2%	3.4%
Nursing homes (52)	1.6%	1.0%	1.1%	0.8%
Nonprofit nursing homes' services to households	1.5%	1.1%	0.3%	0.8%
Proprietary and government nursing homes	1.7%	0.9%	1.6%	0.8%
Prescription drugs	5.6%	4.5%	4.3%	5.7%
Nonprescription drugs	5.9%	4.9%	6.6%	4.7%

Quarterly Performance

Health Care Select Sector SPDR Fund (\$XLV)



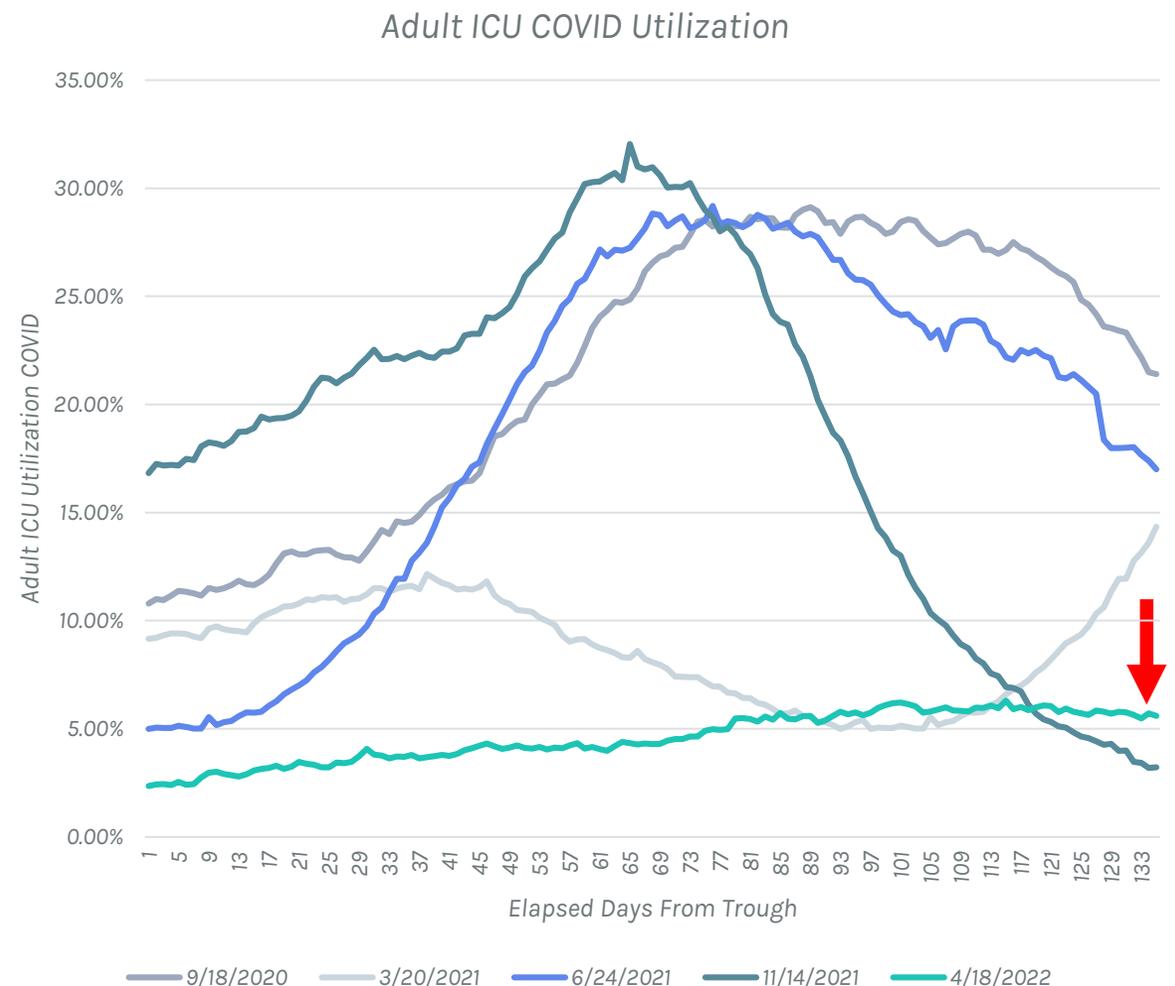
Data Sources: Federal Reserve Economic Data (FRED)
FactSet Research Systems Inc.

Current COVID-19 Wave Less Severe

Percentage of COVID Hospitalizations in the ICU



ICU Utilization Post Trough



Quad 4 Ranked Factor Exposure

Combining Quad and Factors across the Health Care Universe

Factor Name	Macro Quad 4				
	Average 3M Performance				Q4 vs Q1
	Quartile 1	Quartile 2	Quartile 3	Quartile 4	Effect Size
Short Interest Days to Cover	7.76	2.51	-0.94	0.17	7.59
Consensus Sales Momentum Bin1 (-1,0,+1)	0.05	2.02	2.56	5.92	5.87
Consensus Sales Estimate Momentum	0.11	0.28	3.13	5.65	5.55
EV/Sales	0.66	0.88	3.21	5.87	5.21
Sales Bin2	4.80	3.84	1.95	-0.15	4.95
EBITDA NTM	-0.88	3.31	2.57	3.07	3.94
Consensus Sales Acceleration Standardized	8.62	7.65	9.22	4.95	3.67
Consensus Sales Slope Unstandardized	-0.27	1.88	3.70	3.25	3.52
EBITDA Growth NTM/LTM	2.58	3.12	2.38	-0.39	2.97
Dollar Volume	1.14	1.82	3.21	4.10	2.96
Consensus EPS Growth, STM/NTM	4.87	0.07	2.88	2.19	2.68
Consensus EPS Growth, NTM/LTM	4.83	0.86	1.95	2.37	2.46
EV/EBITDA	5.12	-2.32	3.04	3.04	2.09
MicroQuad Average	2.76	6.40	3.72	0.72	2.04
Consensus Sales Growth, STM/NTM	3.27	2.89	3.05	1.24	2.03
Sales Correlation	4.28	2.09	1.53	2.82	1.45
Consensus Sales Growth, NTM/LTM	1.59	2.75	3.06	2.99	1.40
Consensus EBITDA Growth STM/NTM	0.98	2.31	2.58	2.31	1.33
Enterprise Value	1.72	2.01	3.56	3.00	1.28
Price Volatility, Quarterly	3.26	2.51	2.25	2.33	0.92
EBITDA Margin	1.27	2.91	2.52	2.14	0.87
Sellside Rating	3.60	2.24	1.61	2.75	0.85
Consensus Sales NTM	3.57	1.18	2.13	2.74	0.83
Sellside Rating	3.39	-0.53	2.95	4.10	0.71
Market Capitalization	2.34	2.19	2.81	2.90	0.56
Debt to Total Capitalization	3.39	-0.53	2.95	3.75	0.36

This table includes data aggregated from our 306 unique tickers currently held across major Health Care ETFs including XLV, XBI, XHE, XHS, ARKG, and PINK. The data covers the period from 4Q 2008 to 1Q 2022.

The Average 3M Performance is measured daily and averaged for the quarter for each individual equity, which was then grouped by factor quartile.

The Effect Size is the absolute difference between quartile 4 and quartile 1.

Consensus estimate trends are passed through a weekly process that drives our MicroQuad analysis for estimate momentum. Standardized values compare daily readings to the trailing 3 years.

Factor Screen by Macro Quad

MicroQuad plus factors helps identify high probability risks and opportunities

Macro Quad	Rank	Factor	RSQ	Slope	Q1	Q2	Q3	Q4
1	1	MicroQuad Consensus Sales	0.79	5.38	Red	White	White	Green
1	2	Price Volatility	0.77	133.52	Red	White	White	Green
1	3	Revenue Growth STM	0.50	5.30	Red	White	White	Green
1	4	Short interest Days to Cover	0.49	-0.68	Green	White	White	Red
1	5	EBITDA Margin %	0.49	-0.09	Green	White	White	Red

Quad 1: Growth Accelerating and Inflation Slowing
 MicroQuad upper quartile and steepest slope, alongside highest expected revenue growth. High short interest is always a negative factor with 3 days to cover a key threshold. Companies with negative EBITDA are richly rewarded with a huge performance spread over more profitable companies.

Macro Quad	Rank	Factor	RSQ	Slope	Q1	Q2	Q3	Q4
2	1	Price Volatility	0.75	159.23	Red	White	White	Green
2	2	MicroQuad Consensus Sales	0.63	4.39	Red	White	White	Green
2	3	Short interest Days to Cover	0.51	-0.68	Green	White	White	Red
2	4	EV/Sales	0.46	0.25	Red	Red	Green	Green
2	5	Revenue Growth NTM	0.32	5.84	Green	White	White	Red

Quad 2: Growth Accelerating and Inflation Accelerating
 Similar set up to Macro Quad 1 with the inclusion of EV/Sales favoring the higher multiple names.

Macro Quad	Rank	Factor	RSQ	Slope	Q1	Q2	Q3	Q4
3	1	MicroQuad Consensus Sales	0.64	2.76	Red	White	White	Green
3	2	Short interest Days to Cover	0.51	-0.70	Green	White	White	Red
3	3	EV/Sales	0.33	0.11	Red	Red	Green	Green
3	4	Revenue Growth NTM	0.27	2.63	Green	White	White	Red
3	5	EBITDA Margin %	0.13	-0.03	Green	White	White	Red

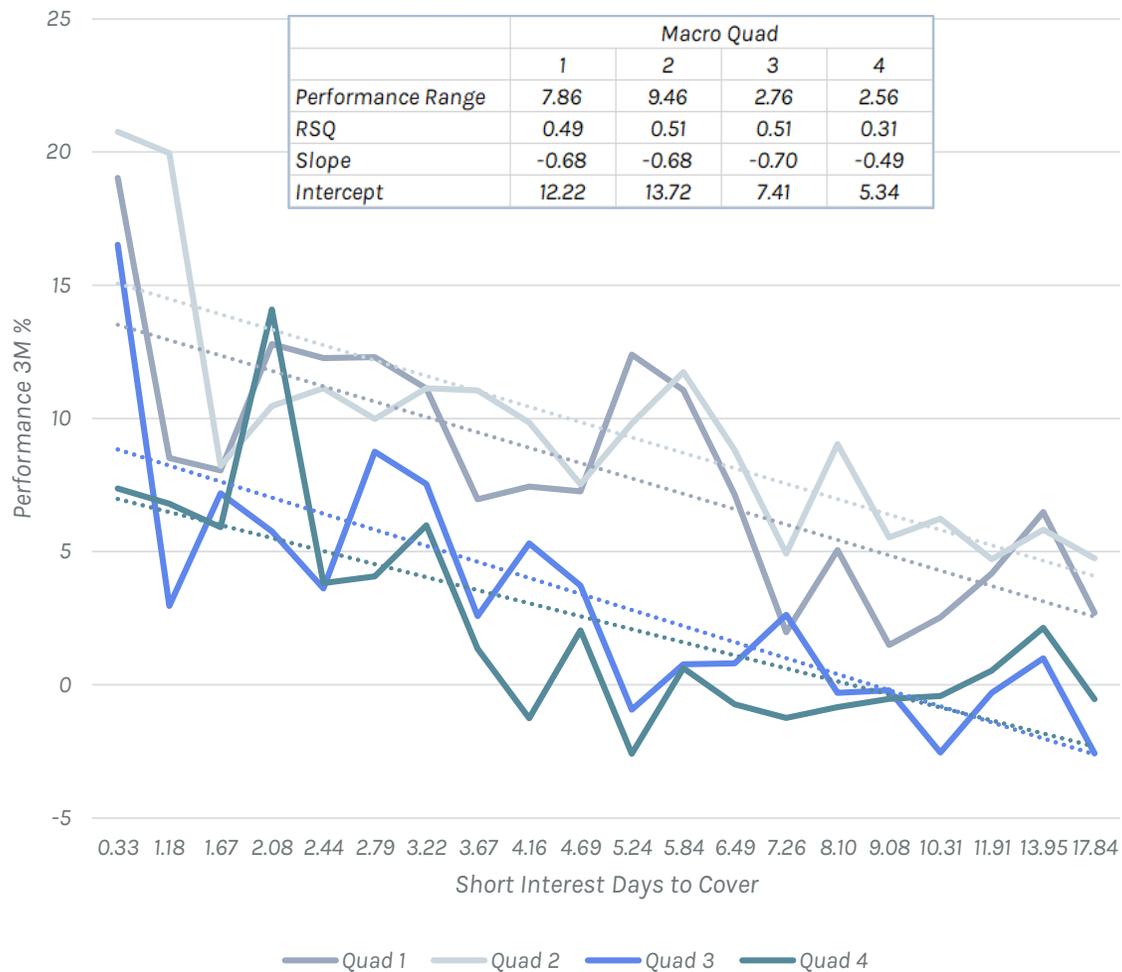
Quad 3: Growth Decelerating and Inflation Accelerating
 Quad 3 is the worst sector for Health Care. Lower multiple names do poorly alongside high short interest names, likely reflecting perceived quality. There is a downshift from higher growth and not-for-profit to slower growth and higher margin.

Macro Quad	Rank	Factor	RSQ	Slope	Q1	Q2	Q3	Q4
4	1	MicroQuad Consensus Sales	0.38	2.23	Red	White	White	Green
4	2	Short interest Days to Cover	0.31	-0.49	Green	Red	Red	Red
4	3	EV/Sales	0.24	0.12	Red	Red	Green	Green
4	4	EBITDA Margin %	0.21	0.06	Red	White	White	Green
4	5	Debt to Total Capital	0.16	0.05	Red	White	White	Green

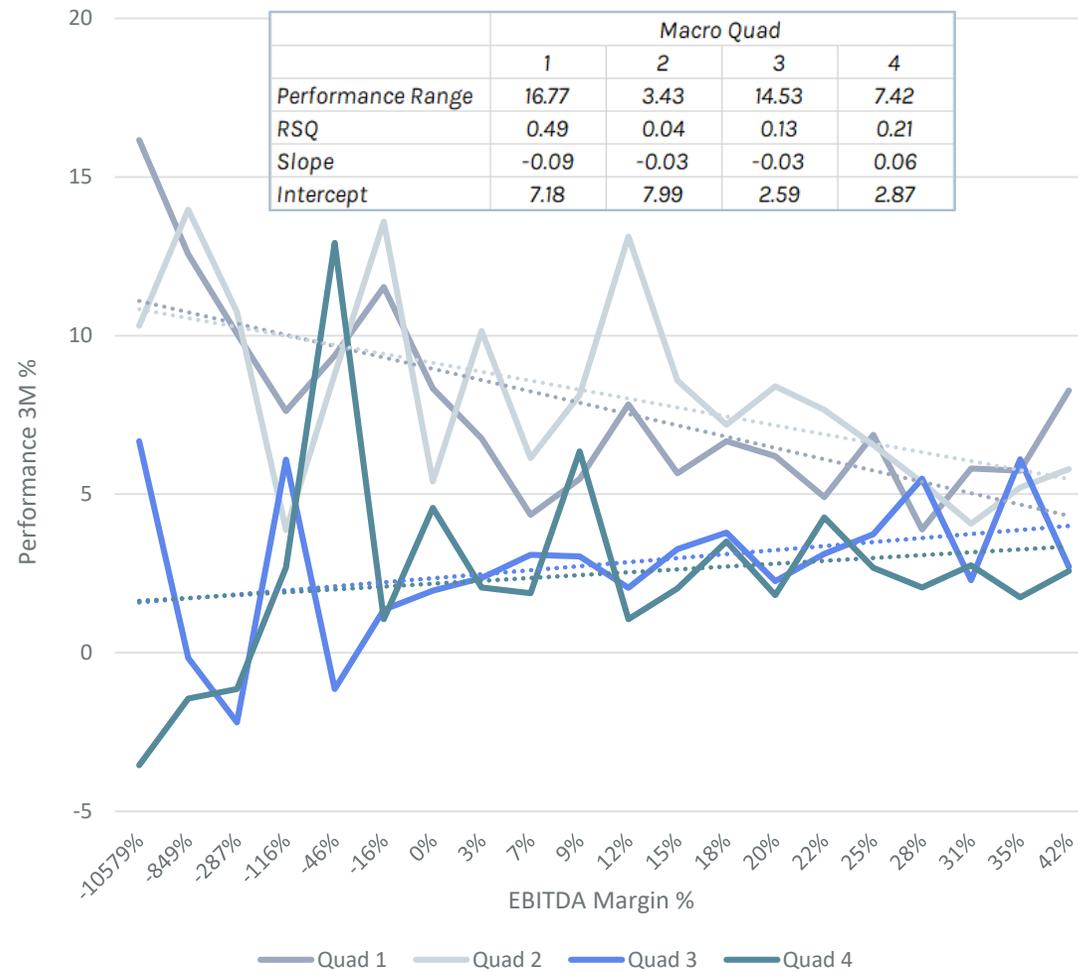
Quad 4: Growth Decelerating and Inflation Slowing
 Health Care growth accelerates in Quad 4. Any short interest is bad short interest in Quad 4, and lower multiple names are considered broken. A negative margin and a low EV/Sales multiple is particularly negative factor combination. Debt to total capital screens out companies using only equity as a source of capital.

Factor Screen: Short Interest and EBITDA Margin %

Short Interest: Quad 4 RSQ 0.31

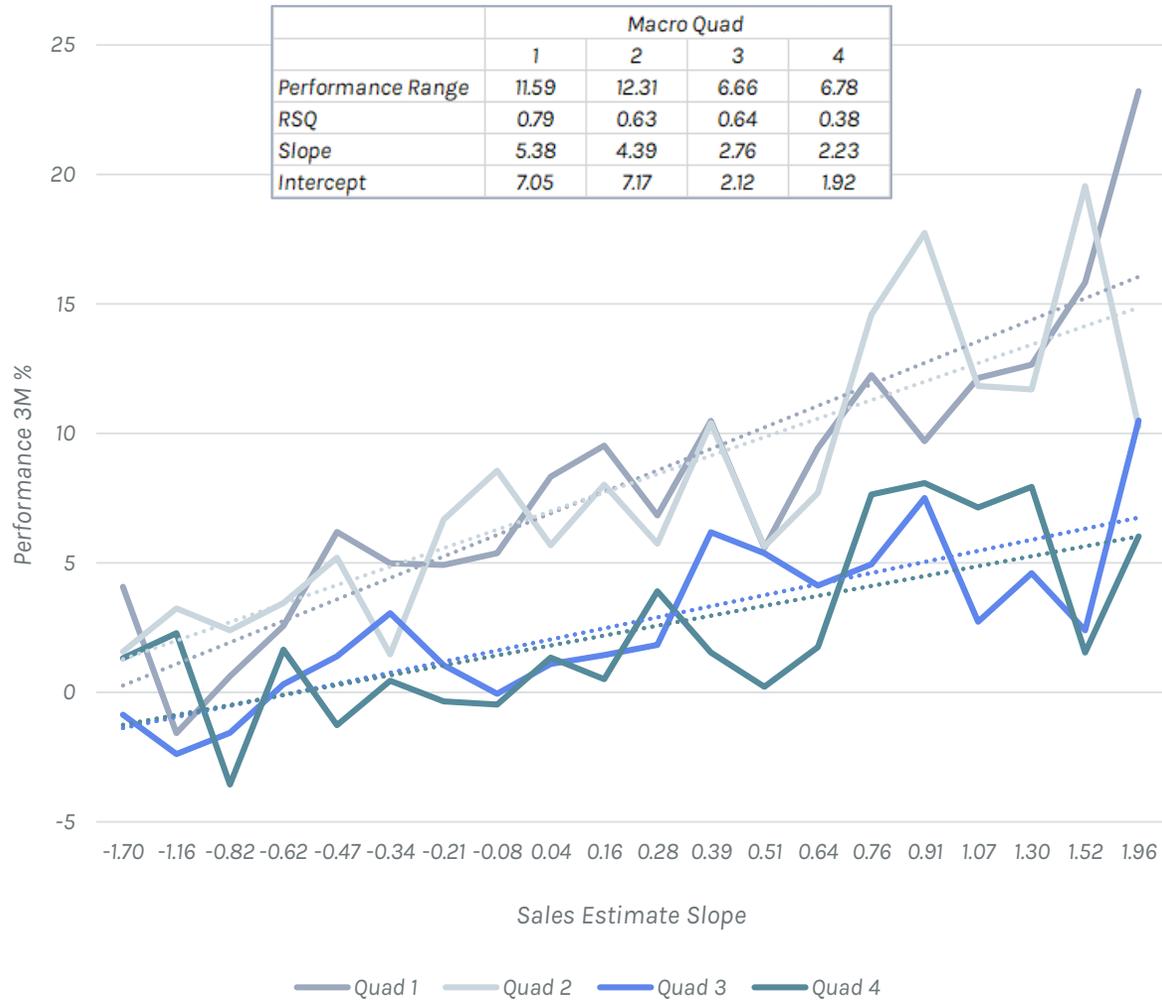


EBITDA Margin: Quad 4 RSQ 0.21

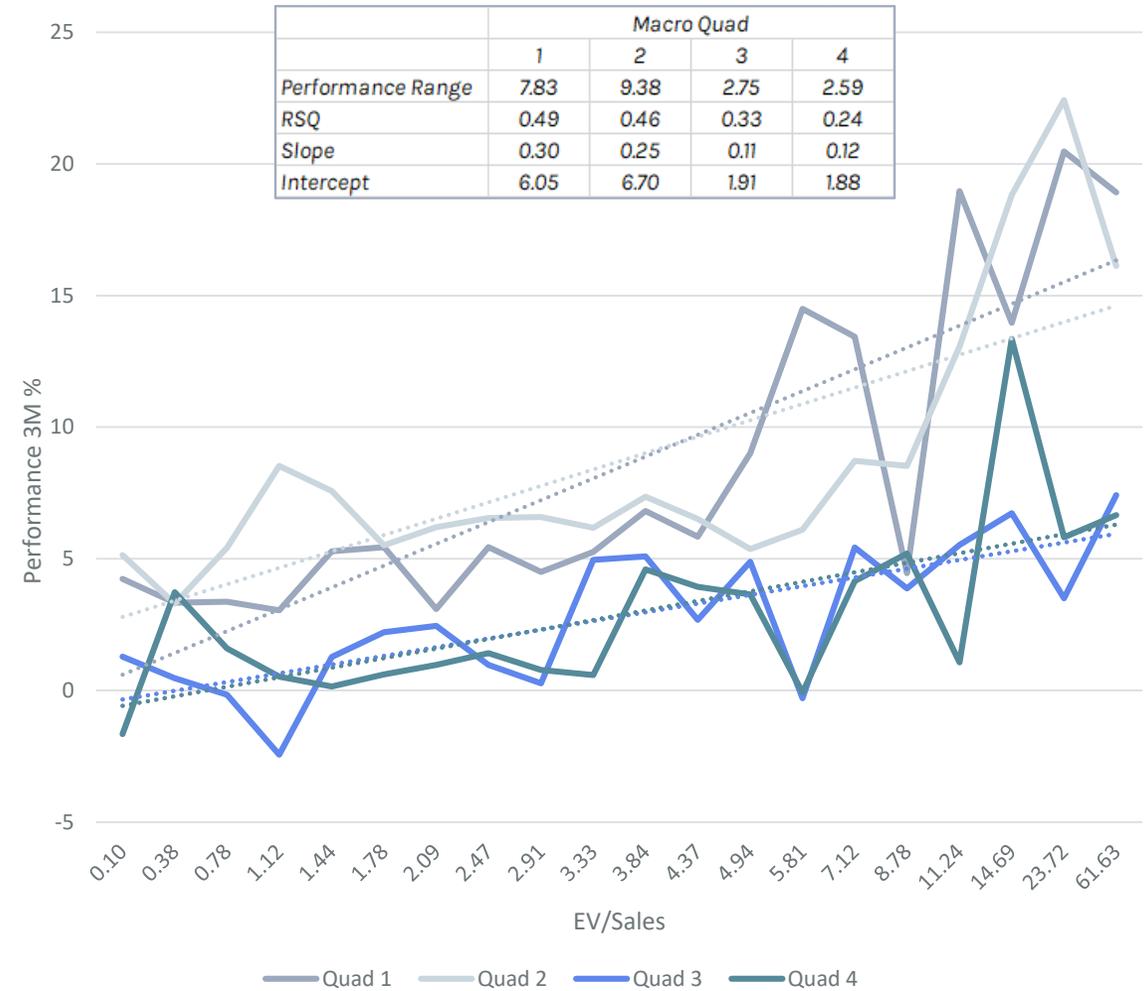


Factor Screen: Consensus Trend and EV/Sales

MicroQuad: Quad 4 RSQ 0.38

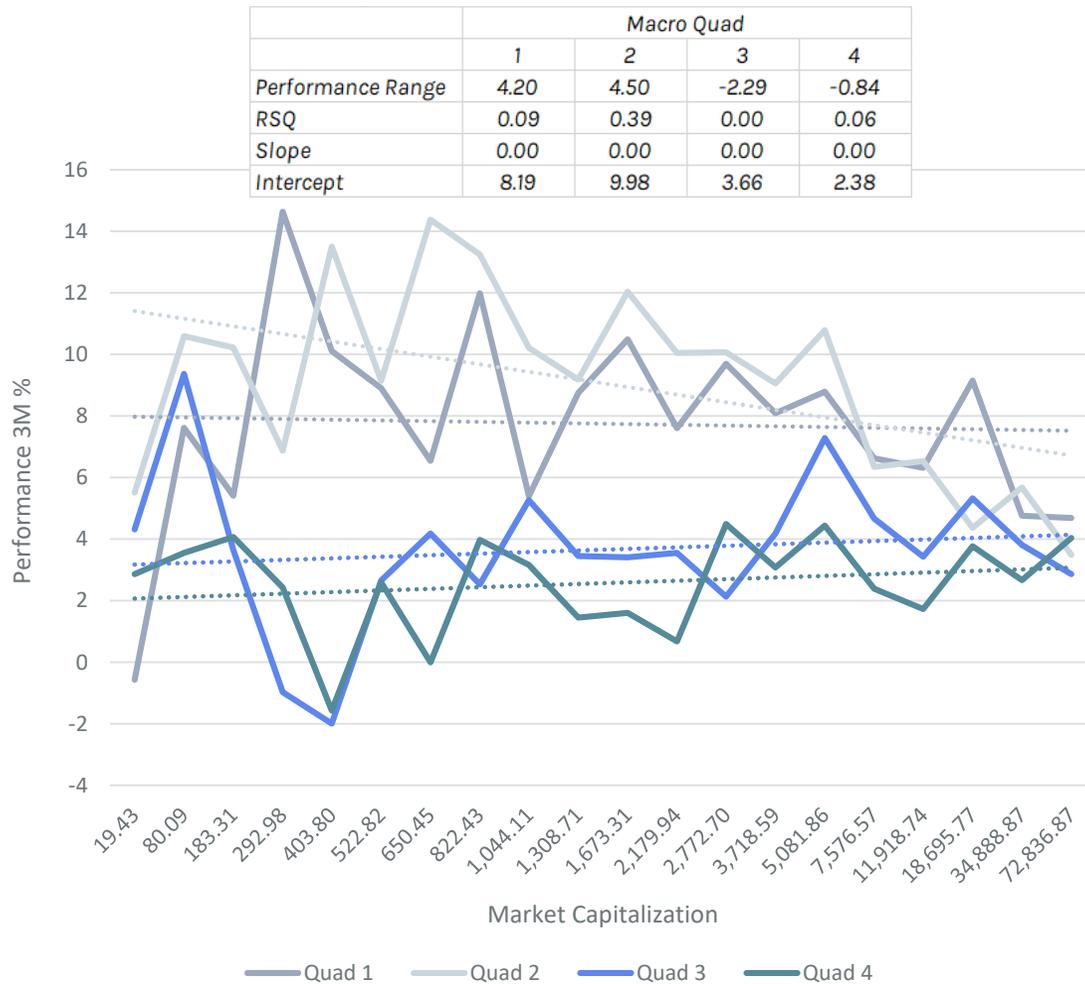


EV/Sales: Quad 4 RSQ 0.24

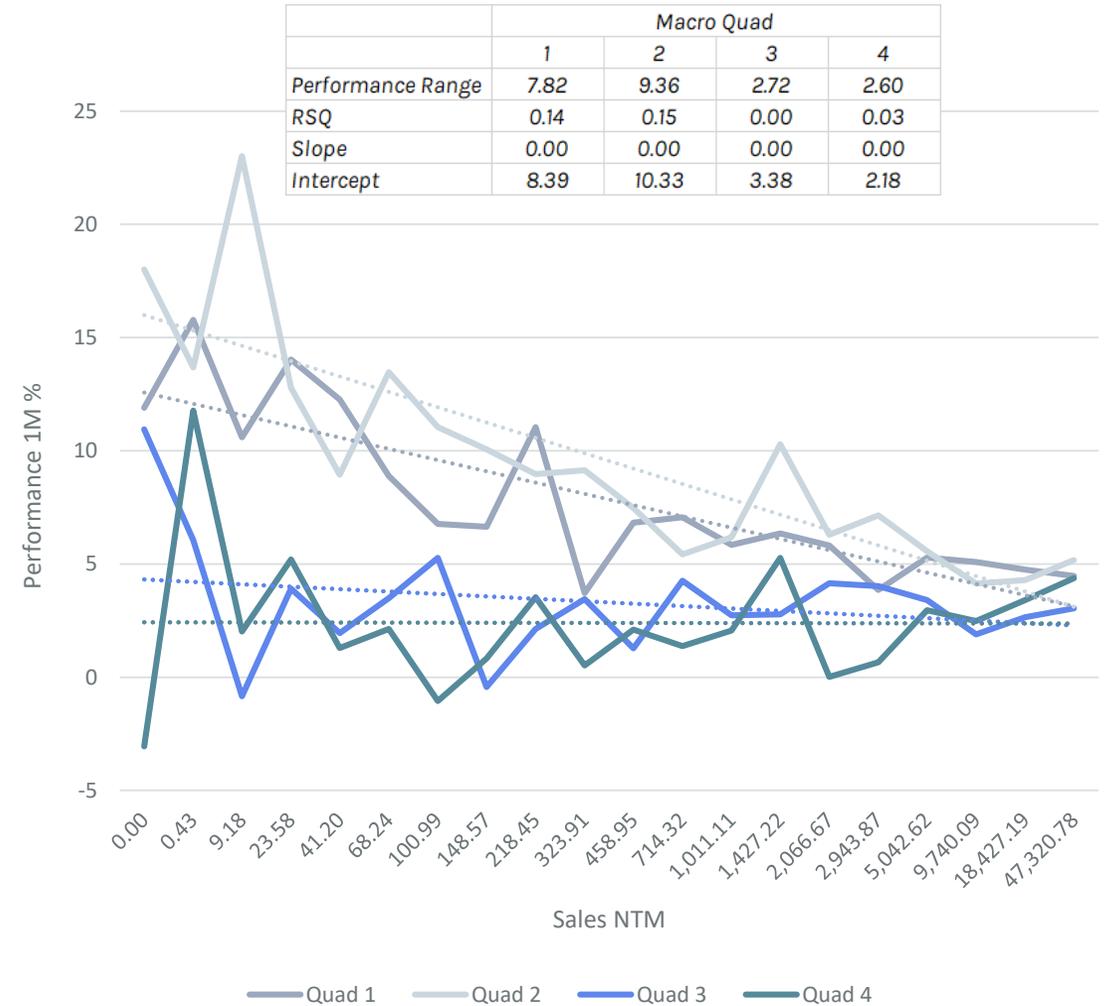


Factor Screen: Market Cap and Sales NTM

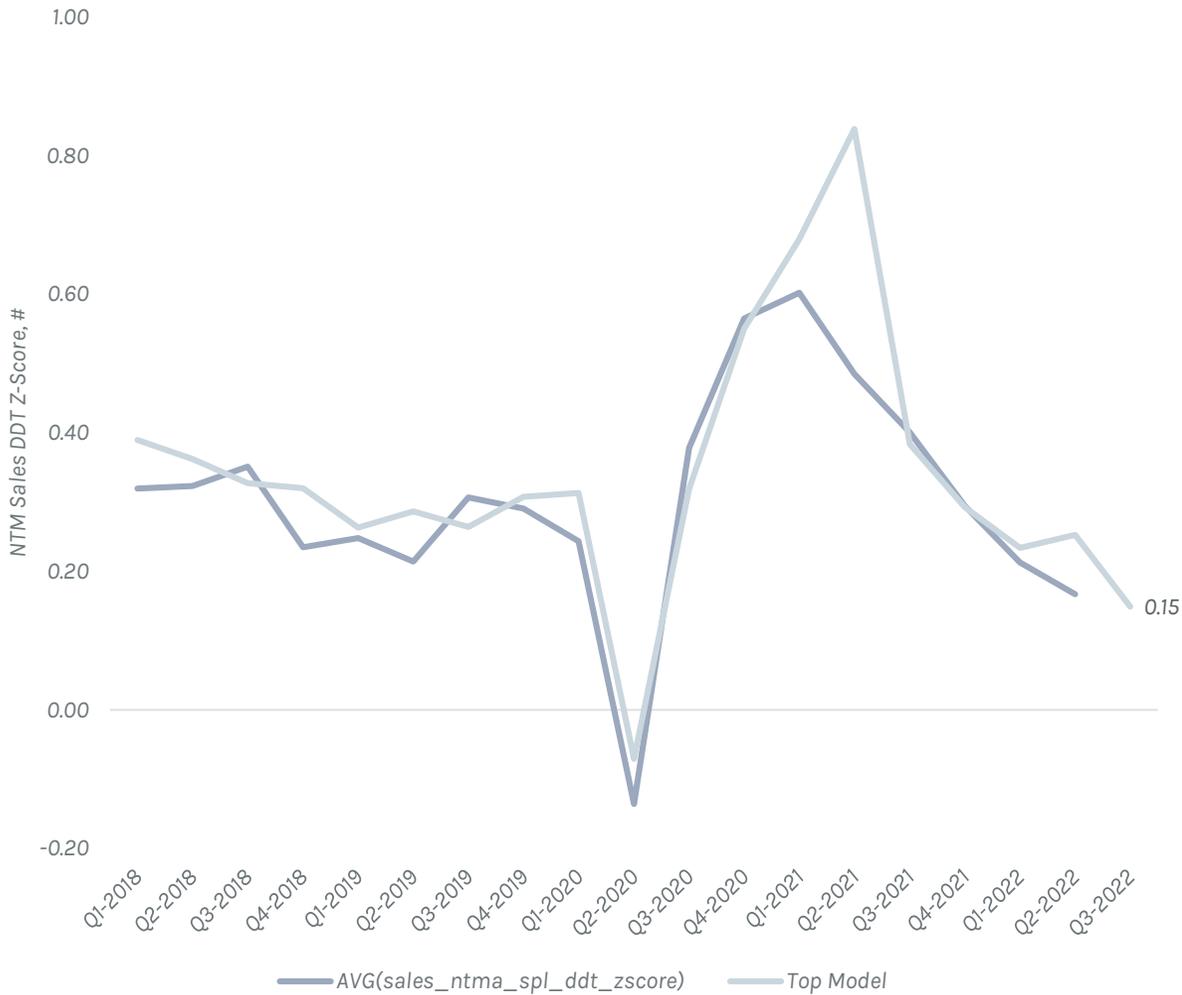
Market Cap: Quad 4 RSQ 0.06



Sales NTM: Quad 4 RSQ 0.03



Forecast Algorithm | Health Care NTM Sales Z-Score



Top Correlations for Health Care NTM Sales Z-Score

Hedgeye Health Care: Forecast Algorithm Model	Correlation	Q1-2017	Q2-2017	Q3-2017	Q4-2017	Q1-2018	Q2-2018	Q3-2018	Q4-2018	Q1-2019	Q2-2019	Q3-2019	Q4-2019	Q1-2020	Q2-2020	Q3-2020	Q4-2020	Q1-2021	Q2-2021	Q3-2021	Q4-2021	Q1-2022	Q2-2022	Q3-2022	Y/YΔ	Q/QΔ
Average Weekly Earnings Of Production And Nonsupervisory Employees, 1982-84 Dollars, Diagnostic Imaging Centers, Seasonally Adjusted	0.742	0.22	0.32	0.27	0.27	0.30	0.29	0.26	0.36	0.30	0.33	0.28	0.35	0.33	0.27	0.33	0.38	0.80	0.97	0.32	0.29	0.34	0.26	0.21	-0.11	-0.05
Nonprescription drugs	0.726	0.05	0.03	0.15	0.24	0.27	0.31	0.31	0.26	0.32	0.31	0.27	0.28	0.26	0.29	0.50	0.44	0.66	0.83	0.41	0.37	0.31	0.18	0.12	-0.29	-0.06
Therapeutic medical equipment	0.708	0.04	0.01	0.16	0.19	0.27	0.38	0.16	0.26	0.30	0.27	0.28	0.27	0.25	0.08	0.35	0.66	0.80	1.16	0.39	0.31	0.39	0.31	0.25	-0.15	-0.07
Medical laboratories	0.667	0.21	0.24	0.19	0.23	0.27	0.27	0.36	0.32	0.32	0.26	0.26	0.26	0.33	0.22	0.38	0.60	0.72	0.77	0.38	0.27	0.33	0.32	0.15	-0.23	-0.17
Average Weekly Hours Of Production And Nonsupervisory Employees, Health Care, Seasonally Adjusted	0.660	0.29	0.38	0.21	0.15	0.15	0.22	0.27	0.26	0.28	0.19	0.22	0.25	0.27	0.30	0.56	0.74	0.50	0.85	0.30	0.06	0.36	0.35	0.32	0.02	-0.03
Average Weekly Hours Of Production And Nonsupervisory Employees, Diagnostic Imaging Centers, Seasonally Adjusted	0.598	0.27	0.21	0.27	0.31	0.30	0.20	0.27	0.30	0.30	0.30	0.27	0.28	0.21	0.18	0.19	0.51	0.98	0.78	0.45	0.25	0.31	0.28	0.25	-0.21	-0.04
Average Weekly Earnings Of All Employees, Diagnostic Imaging Centers, Seasonally Adjusted	0.563	0.27	0.21	0.10	0.12	0.24	0.46	0.39	0.38	0.30	0.28	0.25	0.28	0.25	0.28	0.35	0.34	0.57	0.84	0.27	0.30	0.33	0.36	0.27	0.00	-0.09
Average Weekly Hours Of All Employees, General Medical And Surgical Hospitals, Seasonally Adjusted	0.555	0.33	0.21	0.10	0.22	0.25	0.26	0.13	0.25	0.29	0.29	0.27	0.31	0.28	0.15	0.22	0.33	0.30	0.76	0.41	0.31	0.41	0.37	0.25	-0.16	-0.12
Average Weekly Hours Of Production And Nonsupervisory Employees, General Medical And Surgical Hospitals, Seasonally Adjusted	0.537	0.21	0.33	0.24	0.33	0.30	0.27	0.16	0.28	0.29	0.28	0.28	0.32	0.25	0.08	0.13	0.32	0.28	0.77	0.46	0.29	0.44	0.42	0.35	-0.11	-0.07
Average Weekly Earnings Of All Employees, 1982-1984 Dollars, General Medical And Surgical Hospitals, Seasonally Adjusted	0.529	0.16	0.25	0.28	0.22	0.25	0.21	0.23	0.32	0.32	0.29	0.27	0.19	0.28	0.25	0.27	0.45	0.66	0.43	0.39	-0.04	0.06	0.20	0.05	-0.34	-0.15
AVERAGE WEEKLY EARNINGS OF PRODUCTION AND NONSUPERVISORY EMPLOYEES, 1982-84 DOLLARS Education and health services Offices of dentists Seasonally Adjusted	0.525	0.04	-0.02	0.05	0.19	0.28	0.26	0.30	0.26	0.26	0.27	0.22	0.25	0.26	-0.19	0.54	0.42	0.46	0.95	0.23	0.29	0.42	0.38	0.30	0.07	-0.08
Average Weekly Earnings Of All Employees, 1982-1984 Dollars, Diagnostic Imaging Centers, Seasonally Adjusted	0.514	0.24	0.16	0.23	0.29	0.27	0.48	0.42	0.39	0.29	0.26	0.23	0.28	0.22	0.28	0.39	0.38	0.58	0.68	0.05	0.11	0.23	0.29	0.24	0.19	-0.05
Average Weekly Earnings Of Production And Nonsupervisory Employees, 1982-84 Dollars, General Medical And Surgical Hospitals, Seasonally Adjusted	0.502	0.12	0.23	0.20	0.23	0.29	0.22	0.28	0.28	0.27	0.28	0.25	0.25	0.29	0.22	0.05	0.39	0.34	0.58	0.71	0.26	0.42	0.27	0.06	-0.64	-0.21
AVERAGE WEEKLY EARNINGS OF ALL EMPLOYEES, 1982-1984 DOLLARS Education and health services Offices of dentists Seasonally Adjusted	0.499	0.18	0.28	0.15	0.23	0.26	0.29	0.33	0.33	0.30	0.24	0.25	0.26	0.26	0.24	0.53	0.50	0.55	0.99	0.24	0.23	0.38	0.34	0.31	0.07	-0.04
AVERAGE WEEKLY EARNINGS OF PRODUCTION AND NONSUPERVISORY EMPLOYEES Education and health services Offices of dentists Seasonally Adjusted	0.492	0.20	-0.04	0.11	0.25	0.31	0.23	0.27	0.27	0.29	0.29	0.25	0.25	0.27	-0.23	0.49	0.40	0.48	1.09	0.33	0.40	0.46	0.43	0.35	0.02	-0.08
Average Weekly Earnings Of All Employees, 1982-1984 Dollars, Health Care, Seasonally Adjusted	0.479	0.09	0.19	0.24	0.16	0.24	0.32	0.23	0.29	0.33	0.33	0.27	0.28	0.28	0.26	-0.07	0.17	0.43	0.30	0.20	0.11	0.27	0.23	0.15	-0.06	-0.09
AVERAGE WEEKLY HOURS OF PRODUCTION AND NONSUPERVISORY EMPLOYEES Education and health services Offices of specialty therapists Seasonally Adjusted	0.477	0.28	0.07	0.15	0.14	0.09	0.25	0.34	0.28	0.28	0.27	0.24	0.31	0.33	0.26	0.27	0.38	0.55	0.57	0.28	0.07	0.30	0.27	0.21	-0.07	-0.06
Average Weekly Hours Of All Employees, Diagnostic Imaging Centers, Seasonally Adjusted	0.403	0.23	0.32	0.29	0.26	0.28	0.18	0.19	0.30	0.30	0.27	0.21	0.26	0.28	0.13	0.12	0.21	0.45	0.74	0.41	0.24	0.36	0.35	0.27	-0.14	-0.08
AVERAGE WEEKLY HOURS OF ALL EMPLOYEES Education and health services Outpatient mental health centers Seasonally Adjusted	0.395	0.00	0.10	0.22	0.36	0.49	0.44	0.37	0.34	0.30	0.29	0.25	0.25	0.27	0.25	0.11	0.21	0.37	0.25	0.16	0.36	0.42	0.33	0.21	0.05	-0.11
AVERAGE WEEKLY EARNINGS OF PRODUCTION AND NONSUPERVISORY EMPLOYEES Education and health services Offices of optometrists Seasonally Adjusted	0.393	0.22	0.48	0.22	0.26	0.37	0.33	0.26	0.31	0.31	0.28	0.23	0.26	0.28	0.06	0.17	0.17	0.17	0.54	0.21	0.24	0.41	0.39	0.37	0.16	-0.02
Aggregate weekly hours of all employees, thousands, diagnostic imaging centers, seasonally adjusted	0.313	0.16	0.25	0.28	0.29	0.31	0.20	0.20	0.29	0.31	0.30	0.22	0.31	0.28	0.11	0.05	0.17	0.31	0.71	0.44	0.37	0.45	0.40	0.29	-0.15	-0.11
Average Weekly Hours Of Production And Nonsupervisory Employees, Medical Laboratories, Seasonally Adjusted	0.312	0.20	0.17	0.26	0.35	0.25	0.14	0.39	0.32	0.30	0.26	0.31	0.31	0.28	0.08	0.27	0.35	0.35	1.02	0.28	0.18	0.35	0.35	0.41	0.14	0.06
AVERAGE WEEKLY HOURS OF PRODUCTION AND NONSUPERVISORY EMPLOYEES Education and health services Outpatient mental health centers Seasonally Adjusted	0.309	0.06	0.11	0.35	0.41	0.44	0.37	0.33	0.34	0.30	0.28	0.19	0.30	0.30	0.26	0.20	0.20	0.24	0.27	0.44	0.42	0.41	0.28	0.30	-0.14	0.02
All employees, thousands, offices of chiropractors, seasonally adjusted	0.291	0.18	0.26	0.20	0.37	0.30	0.31	0.25	0.28	0.30	0.26	0.23	0.26	0.25	0.15	0.18	0.17	0.26	0.85	0.39	0.44	0.45	0.44	0.35	-0.04	-0.09
Women Employees, Thousands, Offices Of Physicians, Except Mental Health, Seasonally Adjusted	0.283	0.22	0.10	0.09	0.18	0.18	0.30	0.40	0.36	0.30	0.30	0.22	0.26	0.28	0.03	0.05	0.18	0.26	0.66	0.46	0.44	0.45	0.43	0.36	-0.10	-0.07

Quad 4 Long Screens Results

Low short interest, (+) EBITDA margin, (+) Sales estimate momentum

Ticker	Company Name	Enterprise Value	Sales Estimate Momentum	SI/Free Float	EV/Sales	EBITDA Margin NTM %	EBITDA Margin STM %
ABMD	ABIOMED, Inc.	11012.40	0.61	3.47	8.96	27%	28%
ANGO	AngioDynamics, Inc.	886.61	0.36	3.63	2.53	7%	8%
ATRC	AtriCure, Inc.	2105.87	0.77	3.59	5.80	1%	5%
BSX	Boston Scientific Corporation	67180.66	0.09	1.19	5.03	29%	30%
CAH	Cardinal Health, Inc.	19951.40	1.79	3.14	0.10	1%	1%
CSII	Cardiovascular Systems, Inc.	410.36	0.70	3.31	1.56	0%	2%
ENSG	Ensign Group, Inc.	6078.34	0.32	3.48	1.93	13%	13%
EXEL	Exelixis, Inc.	4549.08	0.09	3.60	2.57	27%	29%
HAE	Haemonetics Corporation	4437.99	0.86	3.44	4.02	26%	27%
INCY	Incyte Corporation	13308.43	0.77	2.96	3.56	29%	37%
INGN	Inogen, Inc.	475.26	0.67	3.35	1.19	1%	1%
ITGR	Integer Holdings Corporation	3227.19	0.48	2.15	2.27	21%	22%
LIVN	LivaNova Plc	3607.91	0.45	3.64	3.45	18%	20%
LNTH	Lantheus Holdings Inc	5786.31	0.62	3.93	5.97	43%	44%
MCK	McKesson Corporation	57679.66	1.35	1.88	0.21	2%	2%
MMSI	Merit Medical Systems, Inc.	3691.25	0.22	1.72	3.16	21%	22%
NBIX	Neurocrine Biosciences, Inc.	9662.97	0.86	2.95	6.03	25%	32%
PODD	Insulet Corporation	19232.74	1.48	3.34	13.59	15%	18%
RCM	R1 RCM Inc	8371.23	1.74	2.41	3.73	28%	30%
UNH	UnitedHealth Group Incorporated	537873.50	0.01	0.51	1.58	10%	10%
UTHR	United Therapeutics Corporation	8900.73	0.33	2.41	4.31	49%	50%

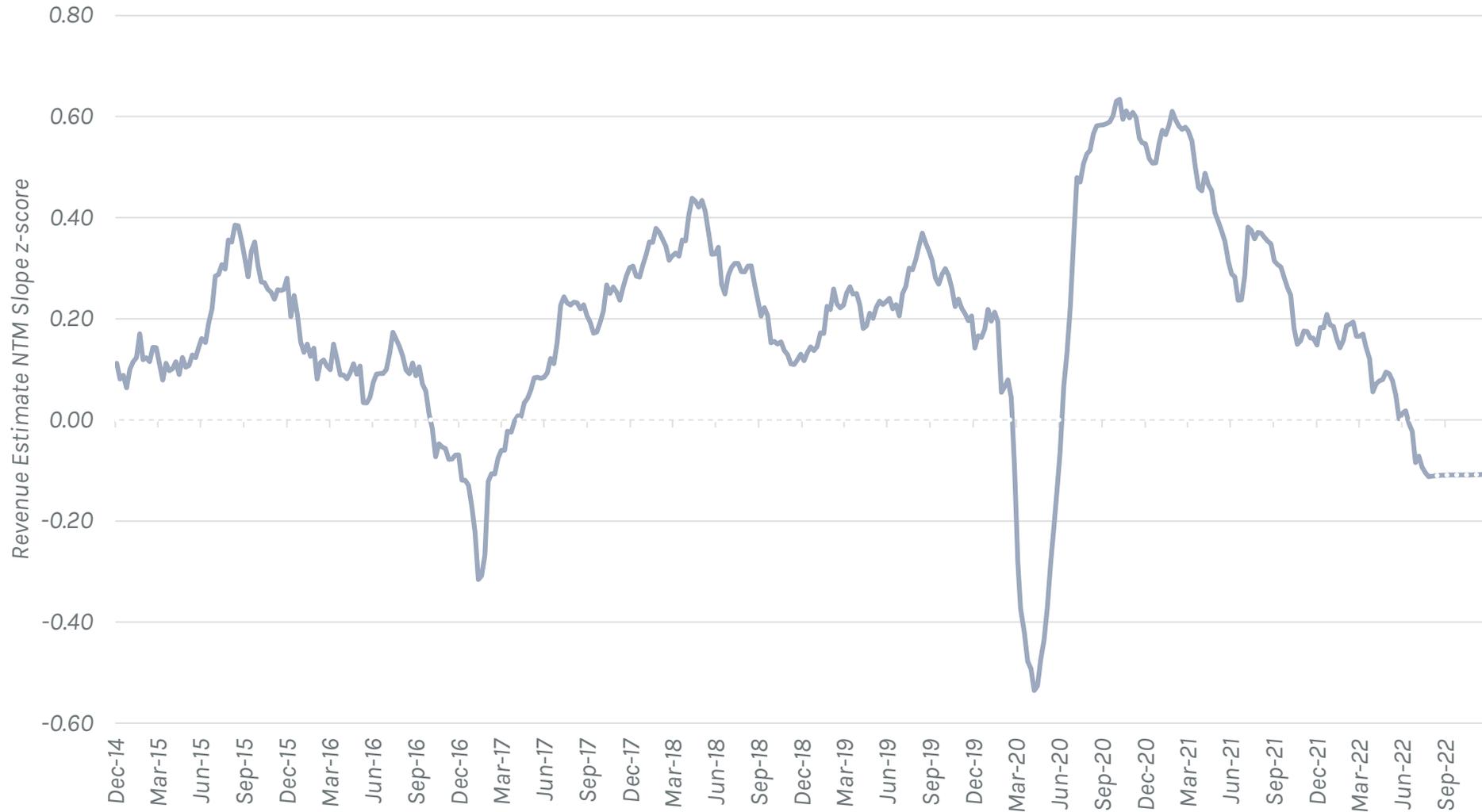
Quad 4 Short Screens Results

High short interest, (-) EBITDA margin, (-) Sales estimate momentum

Ticker	Company Name	Enterprise Value	Sales Estimate Momentum	SI/Free Float	EV/Sales	EBITDA Margin NTM %	EBITDA Margin STM %
ACAD	ACADIA Pharmaceuticals Inc.	2299.51	(0.02)	6.37	3.88	-20%	5%
ACCD	Accolade, Inc.	738.89	(0.63)	6.49	1.93	-8%	-2%
ADPT	Adaptive Biotechnologies Corp.	1219.59	(0.15)	4.69	5.73	-81%	-60%
ARWR	Arrowhead Pharmaceuticals, Inc.	3921.33	(1.09)	4.29	15.49	-59%	-96%
BBIO	BridgeBio Pharma, Inc.	2543.70	(0.81)	21.50	39.20	-767%	-779%
CDNA	CareDx, Inc.	824.15	(1.23)	6.88	2.33	-2%	4%
CLOV	Clover Health Investments Corp. Class A	1058.93	(0.62)	10.85	0.28	-7%	-3%
DNA	Ginkgo Bioworks Holdings, Inc. Class A	3207.33	(1.72)	18.43	7.68	-45%	-20%
EXAS	Exact Sciences Corporation	8237.44	(0.31)	5.40	3.76	-21%	-9%
GH	Guardant Health, Inc.	5653.12	(0.20)	4.66	10.07	-75%	-49%
ICPT	Intercept Pharmaceuticals, Inc.	840.73	(0.85)	48.89	2.67	-32%	-46%
LUNG	Pulmonx Corp.	573.64	(0.04)	9.46	7.93	-67%	-38%
ME	23andMe Holding Co. Class A	1125.72	(0.87)	11.54	4.10	-102%	-93%
NARI	Inari Medical, Inc.	3507.72	(1.02)	10.71	8.42	-3%	2%
NVTA	Invitae Corp.	1766.53	(2.22)	18.61	3.36	-55%	-33%
OM	Outset Medical, Inc.	668.72	(1.64)	9.69	4.78	-78%	-39%
ONEM	1Life Healthcare, Inc.	3673.19	(0.43)	5.60	2.93	-8%	-2%
OPK	OPKO Health, Inc.	1717.89	(0.63)	13.58	1.80	-3%	5%
PACB	Pacific Biosciences of California, Inc.	1391.03	(1.09)	16.19	8.18	-158%	-102%
RARE	Ultragenyx Pharmaceutical, Inc.	3314.47	(0.49)	4.70	7.94	-108%	-71%
RXRX	Recursion Pharmaceuticals, Inc. Class A	1353.19	(0.40)	18.98	26.83	-501%	-476%
TXG	10x Genomics Inc Class A	3561.40	(1.72)	5.65	6.00	-17%	0%
VCYT	Veracyte Inc	1378.91	(0.20)	5.05	4.52	-8%	-3%
VIR	Vir Biotechnology, Inc.	1157.24	(1.40)	7.75	1.91	-1%	-141%

Estimate Momentum | Negative

The average is now declining across our 300+ names



Estimate momentum, or the average slope of the NTM estimate, has been negative since early July 2022, coinciding with the start of earnings season.

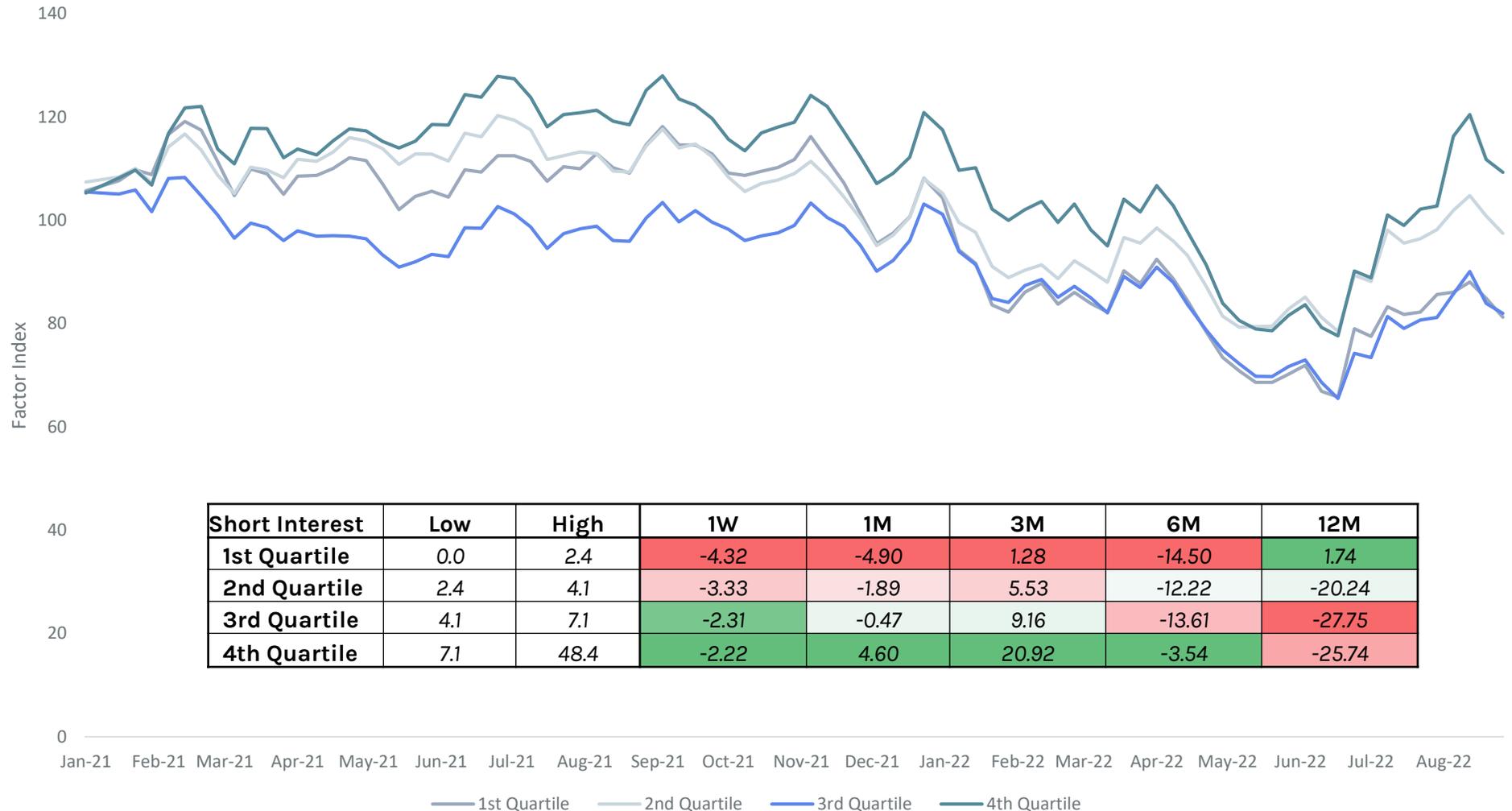
Staffing shortages, foreign exchange headwinds and a tough comparison suppressing estimate trends. 2H22 comps ease with pent up demand coming through.

Factor Index | Short Interest Days to Cover

Short interest is the top Factor in Quad 4

Our work on how to quantify and track the impact of stock factors at the individual equity level shows short interest routinely ranks at or near the top for effect size.

In Quad 4, the separation between low short interest names versus high is dramatic. Although in the last few weeks, the impact has been less significant during the rallies.

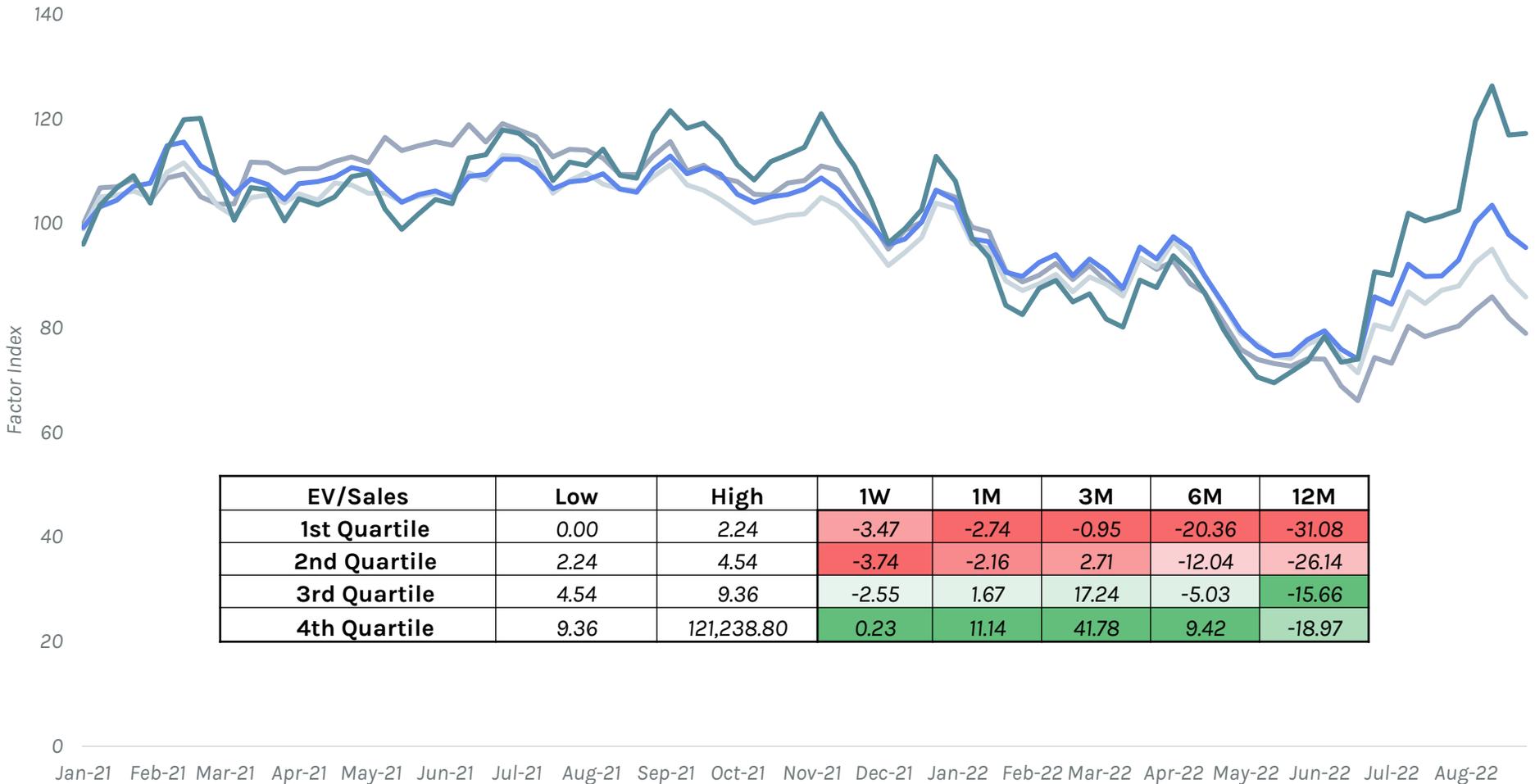


Factor Index | Enterprise Value to Sales

EV/Sales is a mediocre Factor in Quad 4

EV/Sales has been shown only modest results in separating high versus low multiple names.

We did notice that the absolute level of EBITDA saw good separation between large and small values, presumably driven by unprofitable TAM stories, although the signal was lost at the EV/Sales level.



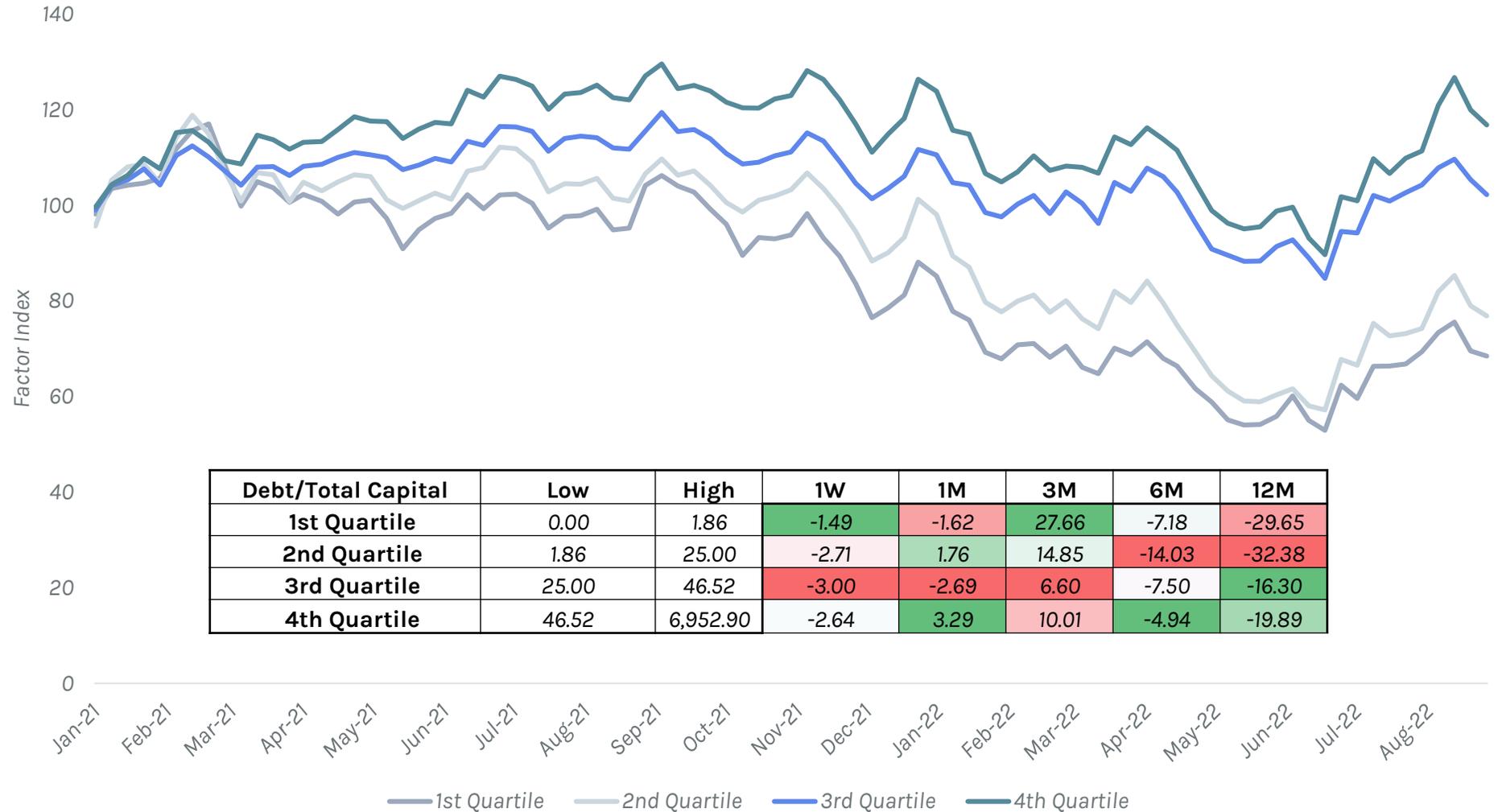
EV/Sales	Low	High	1W	1M	3M	6M	12M
1st Quartile	0.00	2.24	-3.47	-2.74	-0.95	-20.36	-31.08
2nd Quartile	2.24	4.54	-3.74	-2.16	2.71	-12.04	-26.14
3rd Quartile	4.54	9.36	-2.55	1.67	17.24	-5.03	-15.66
4th Quartile	9.36	121,238.80	0.23	11.14	41.78	9.42	-18.97

Factor Index | Debt to Total Capital

Debt to Total Capital is the top Factor in Quad 4

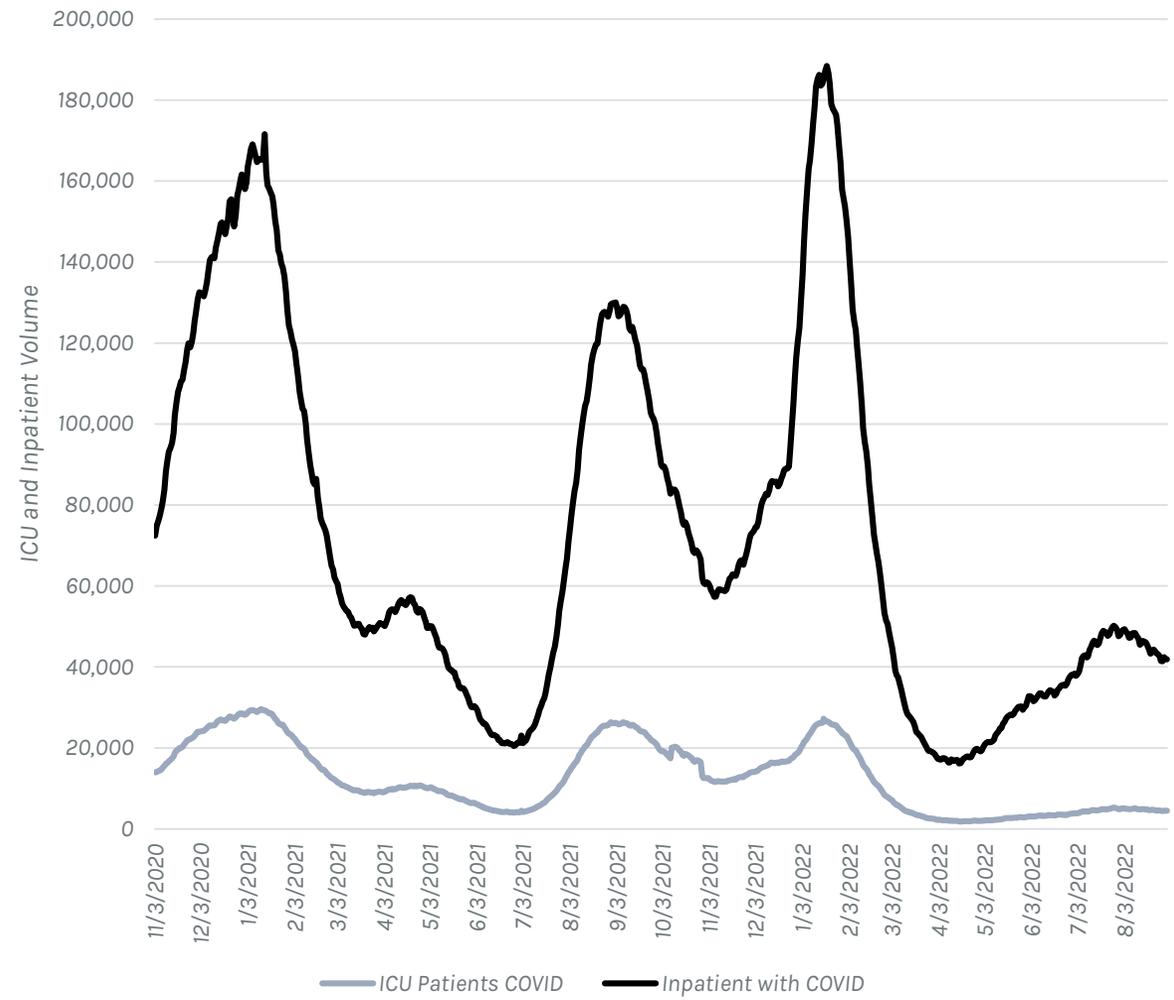
Debt to total capital suggests not that debt is a positive, but instead of correlating to low quality, it more likely reflects market cap and access to capital.

Smaller capitalization stocks tend to use equity instead of debt to fund operations particularly for unprofitable growth.

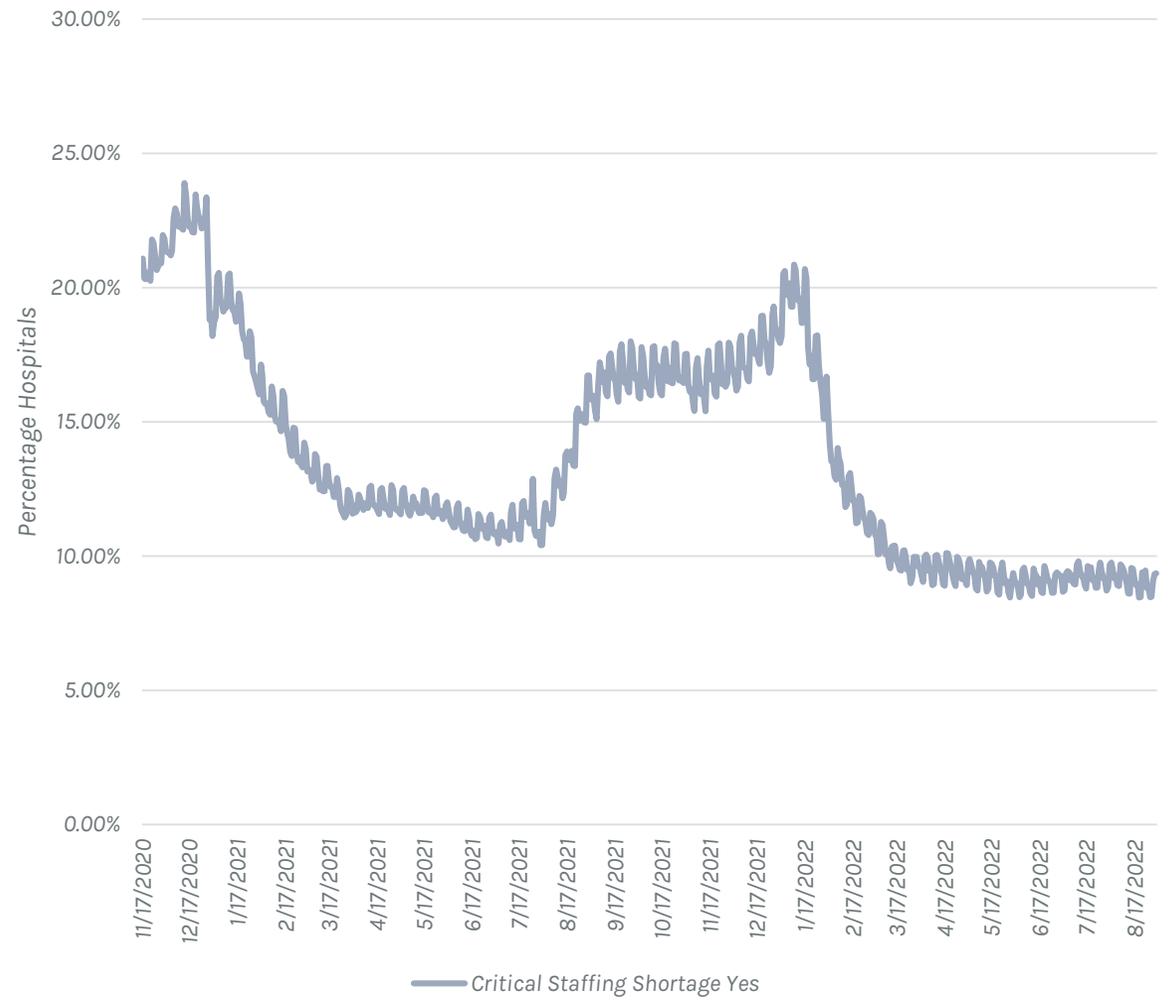


Omicron fading while BA.2 never ramped

New York COVID Hospital Occupancy



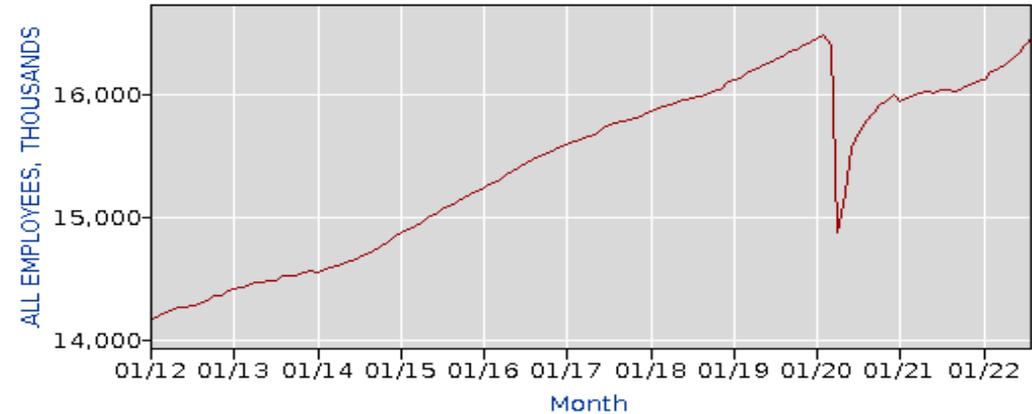
Critical Staffing Shortages



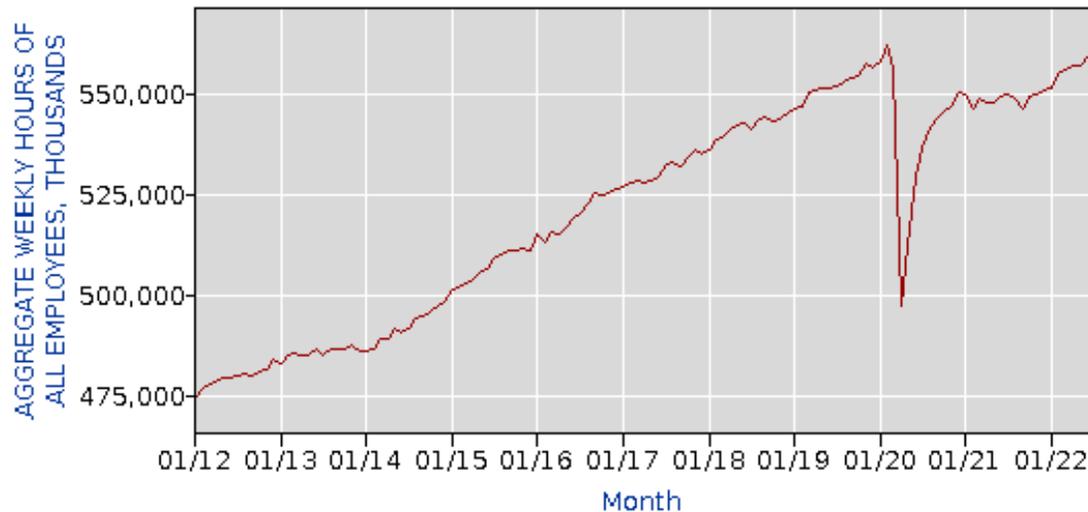
Health Care Employment Trend - July/August 2022

Health Care employment put up a solid gain of 48.2K month over month in August 2022, continuing to emerge from Delta and Omicron headwinds. Wage growth decelerated on a 1-year basis to 7.9% from 8.2% while the 2-year accelerated to 7.7% from 7.5% in July from June. Aggregate hours suggest further strength continued despite wage inflation.

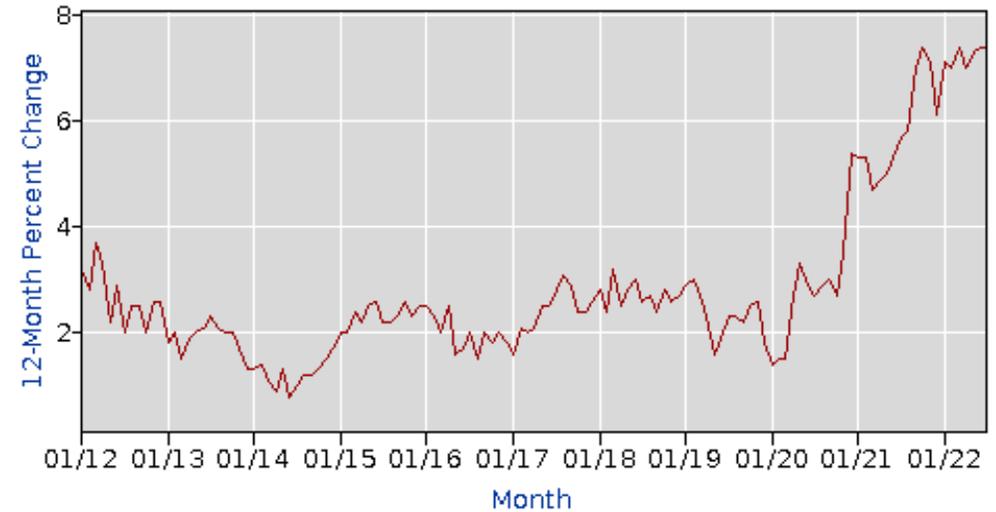
Industry: Health care
NAICS Code: 621,2,3
Data Type: ALL EMPLOYEES, THOUSANDS



Industry: Health care
NAICS Code: 621,2,3
Data Type: AGGREGATE WEEKLY HOURS OF ALL EMPLOYEES, THOUSANDS

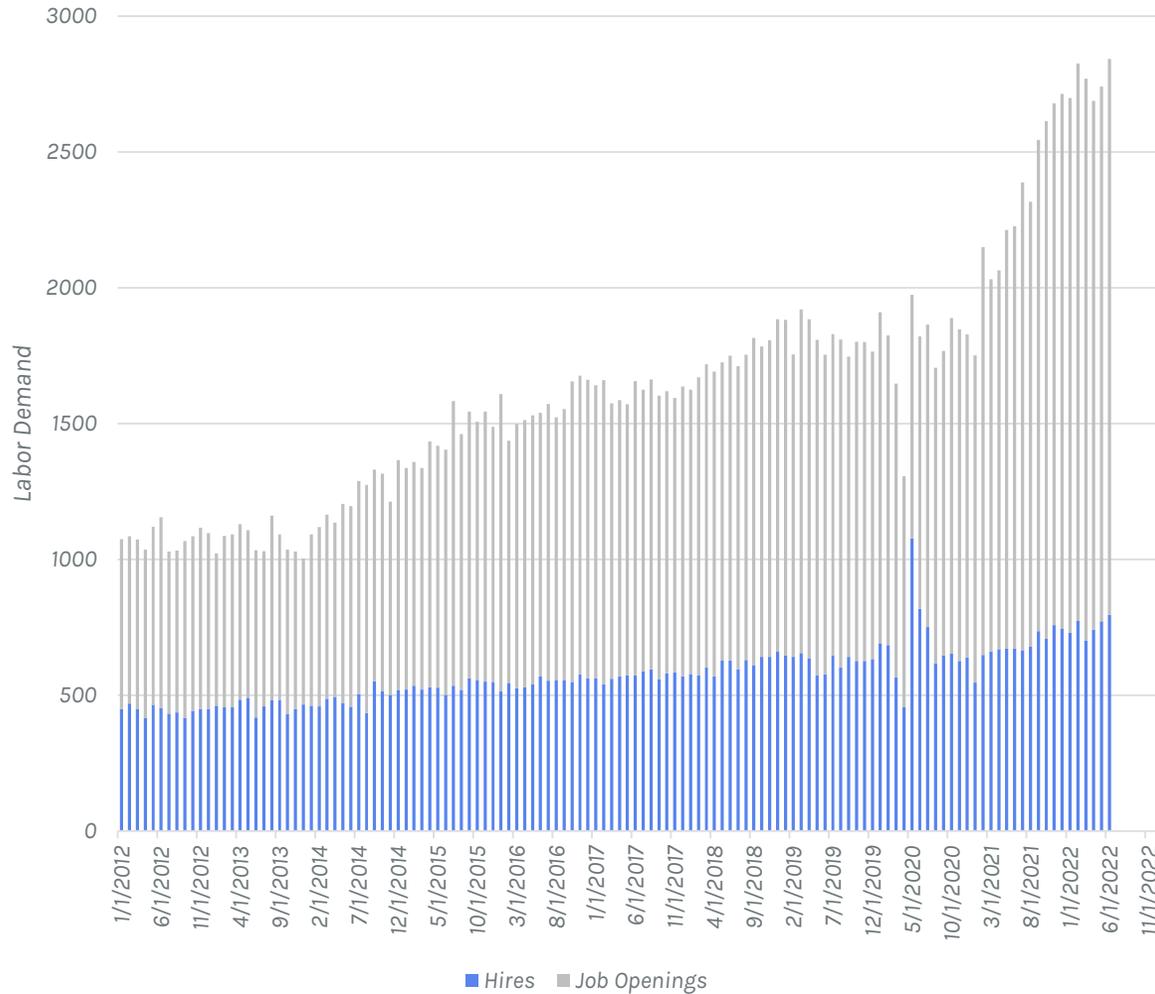


Industry: Health care
NAICS Code: 621,2,3
Data Type: AVERAGE HOURLY EARNINGS OF ALL EMPLOYEES

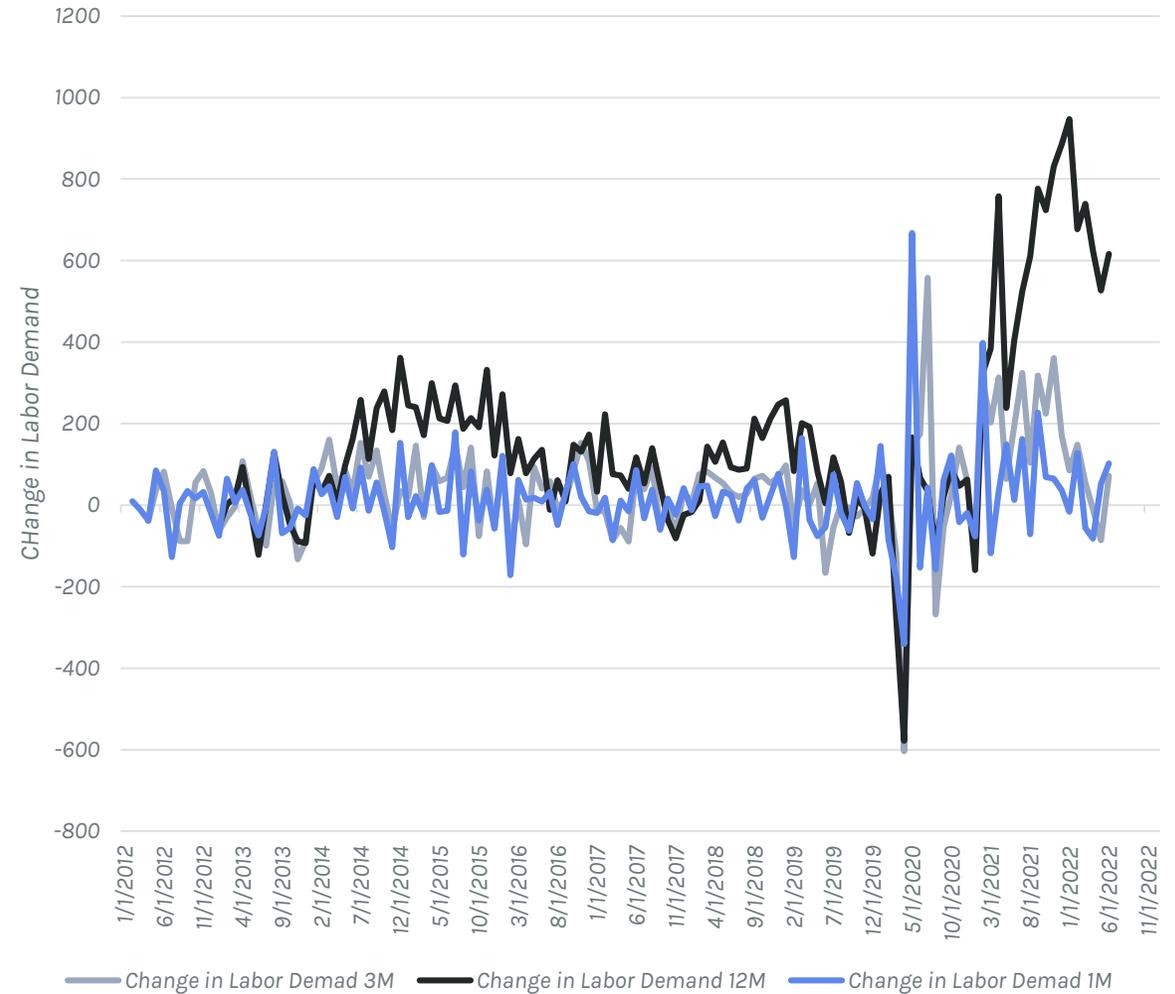


BLS Data | JOLTS Update for June 2022

JOLTS + Hires Level

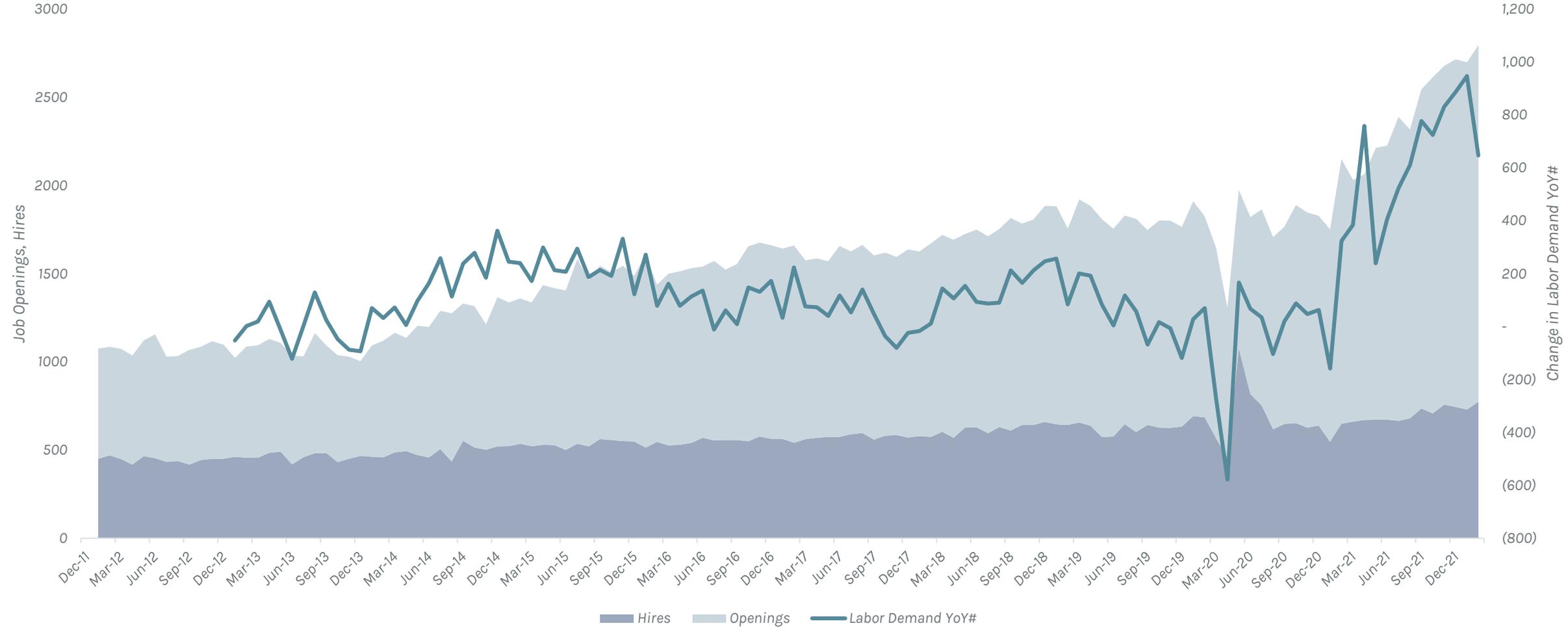


Change in Labor Demand, 1M, 3M, 12M



Health Care Labor Demand is Extremely Elevated

2.0M Job Openings hits a new high even as hiring, which should draw down on Job Openings, hits its own 20-month high.

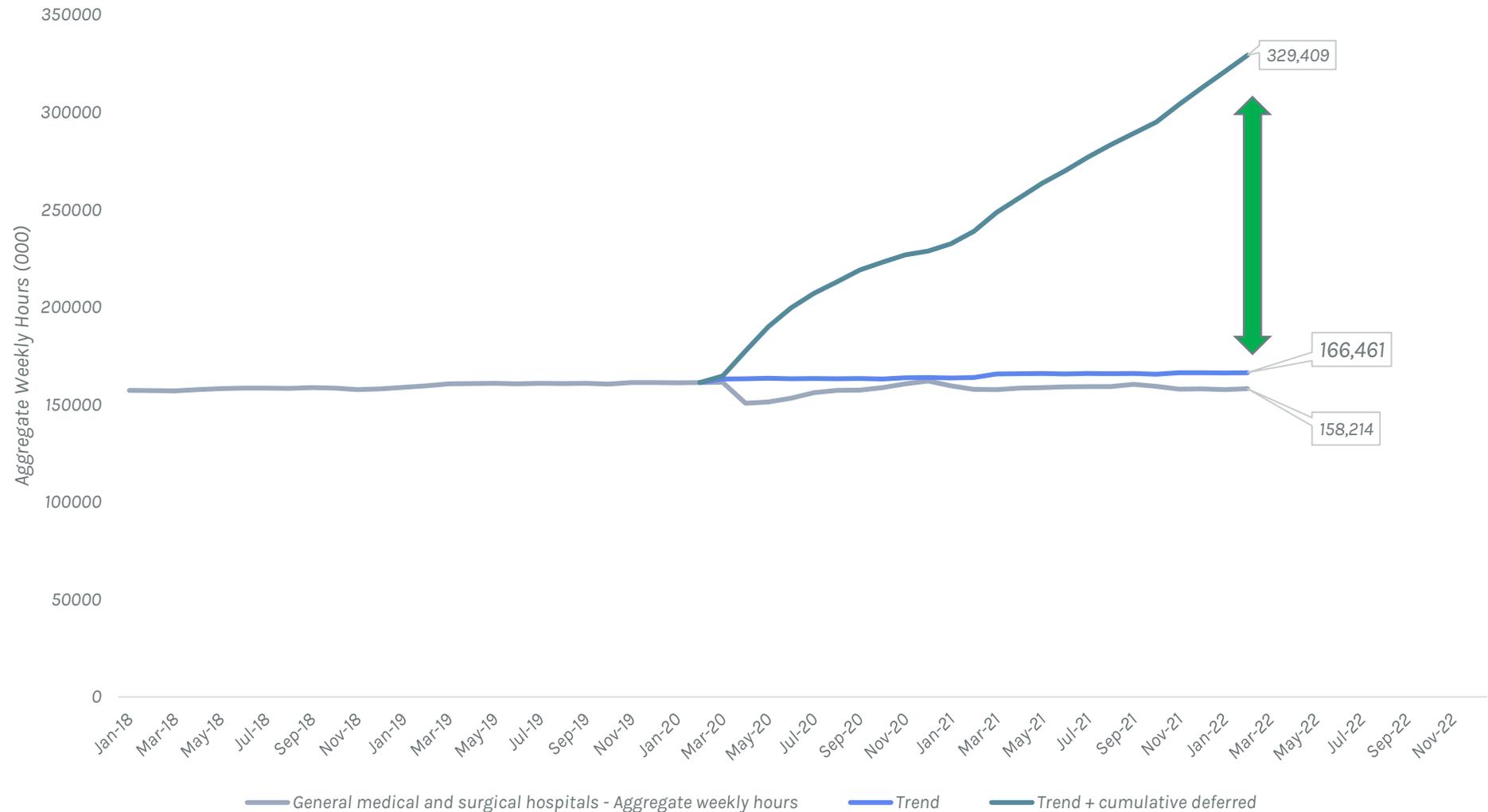


Deferred Care - General Medical and Surgical Hospitals

Hospital care has never recovered to trend and continues to build the deferral pool

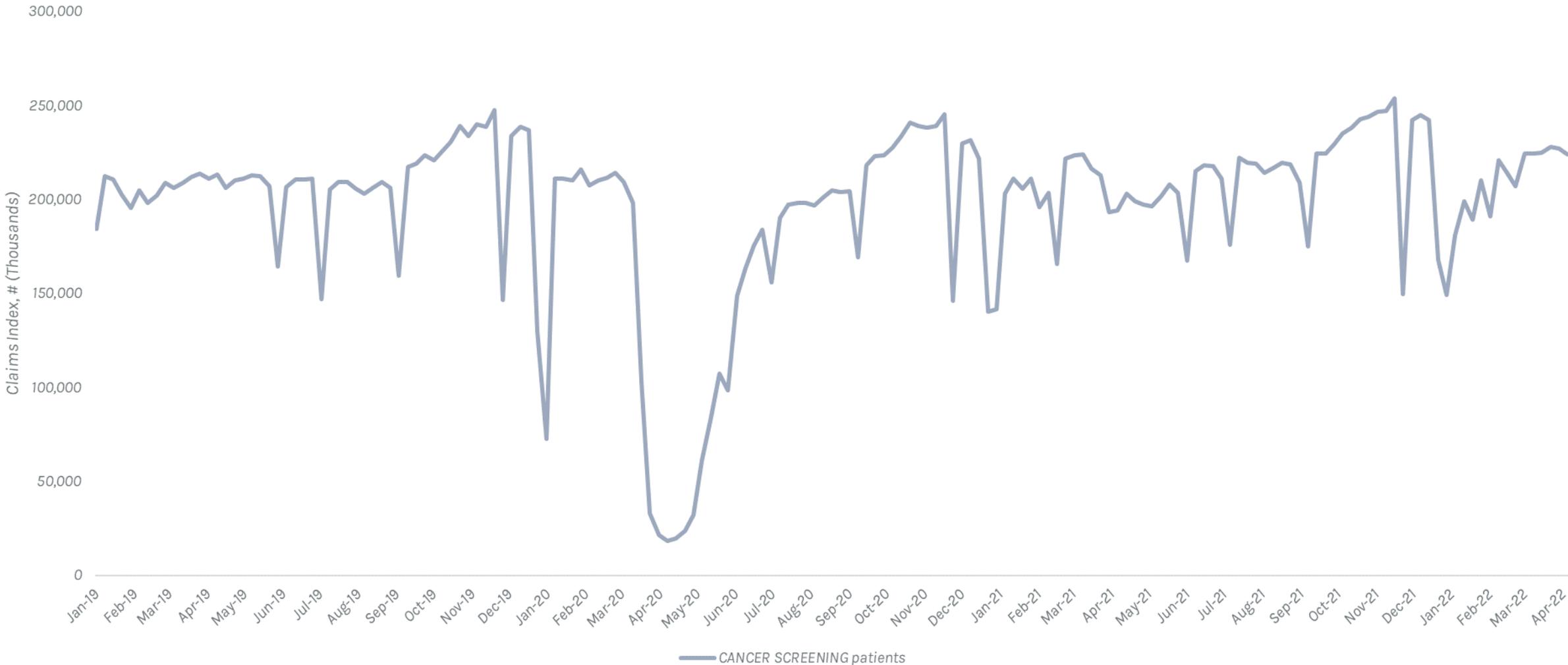
Compared to the pre-pandemic trend, the US General and Medical Surgical Hospitals have built up 329,000 Aggregate Weekly Hours among Production and Nonsupervisory Workers, greater than twice the current Aggregate Weekly Hours reading as of February 2022.

It takes staff to deliver care and the gap in aggregate hours is proportional to the amount of care that was deferred and will return either as incremental patient volume or sicker patients with higher acuity. In either scenario, we should expect above trend volume for an extended period.



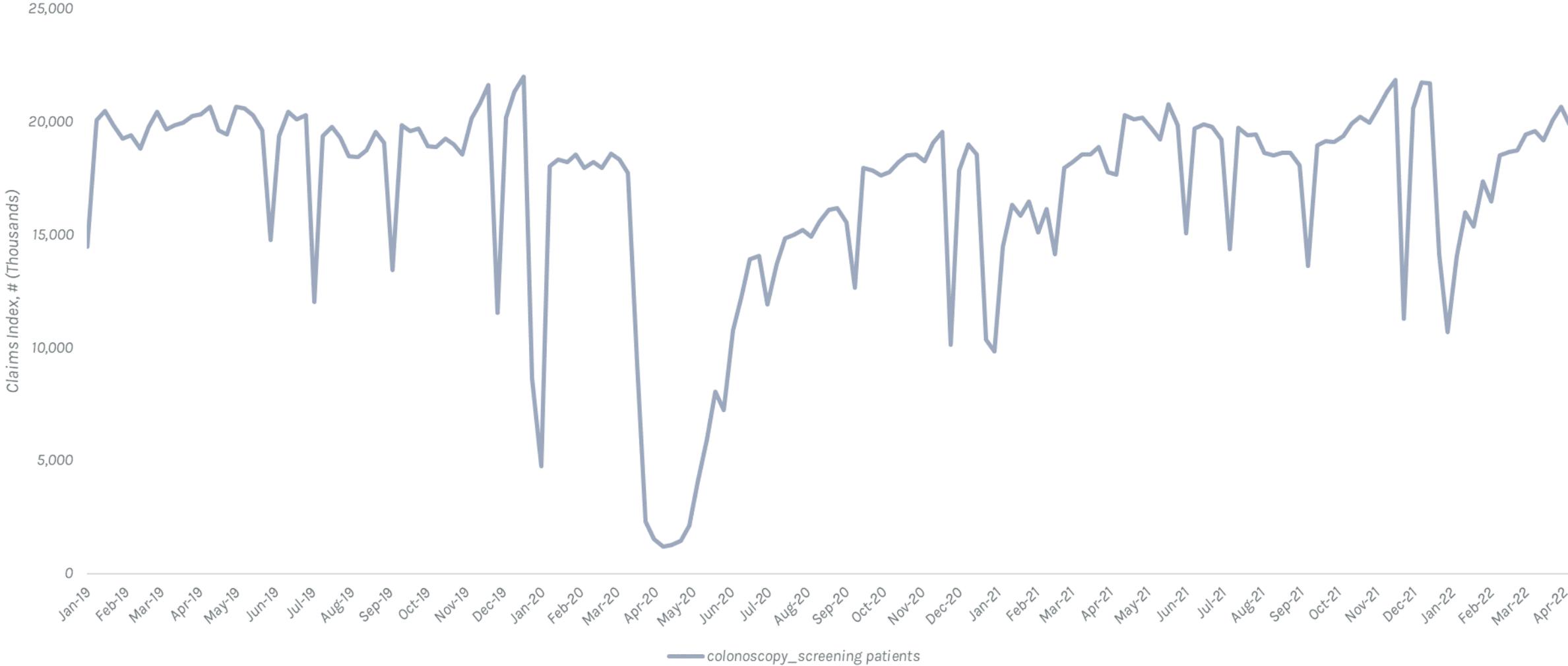
Cancer Screening above 2021 levels

Requires office visits and biopsies, follow for advanced diagnostics such as imaging



Screening Colonoscopy

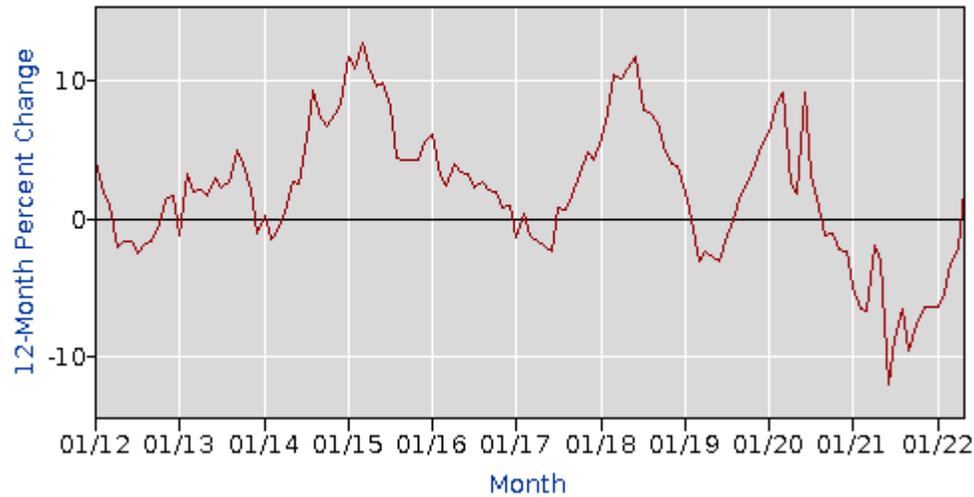
Requires office visits and in person imaging



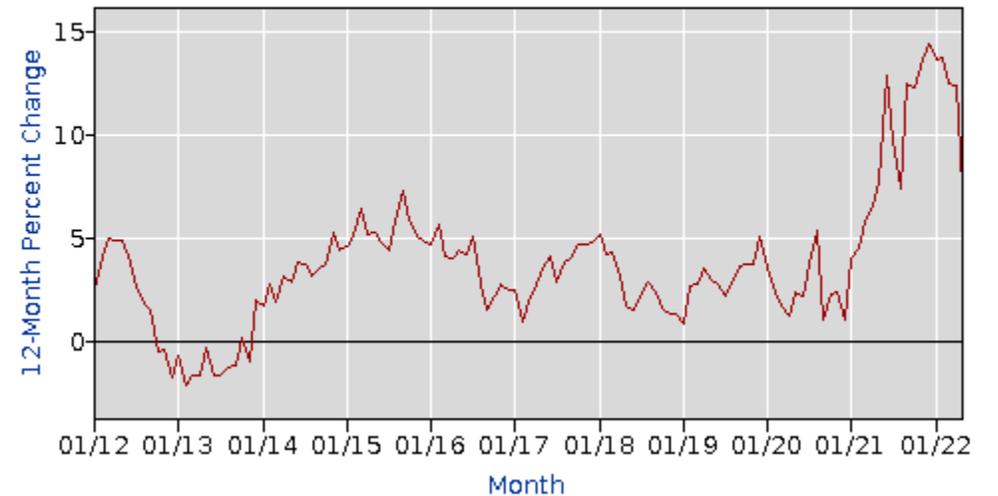
Psych Hospital Wages and Volume Appear to be Turning

The BLS's May 2022 Update includes a turnaround in YoY metrics for both key series

Industry: Psychiatric and substance abuse hospitals
NAICS Code: 6222
Data Type: INDEXES OF AGGREGATE WEEKLY HOURS OF ALL EMPLOYEES, 2007=100



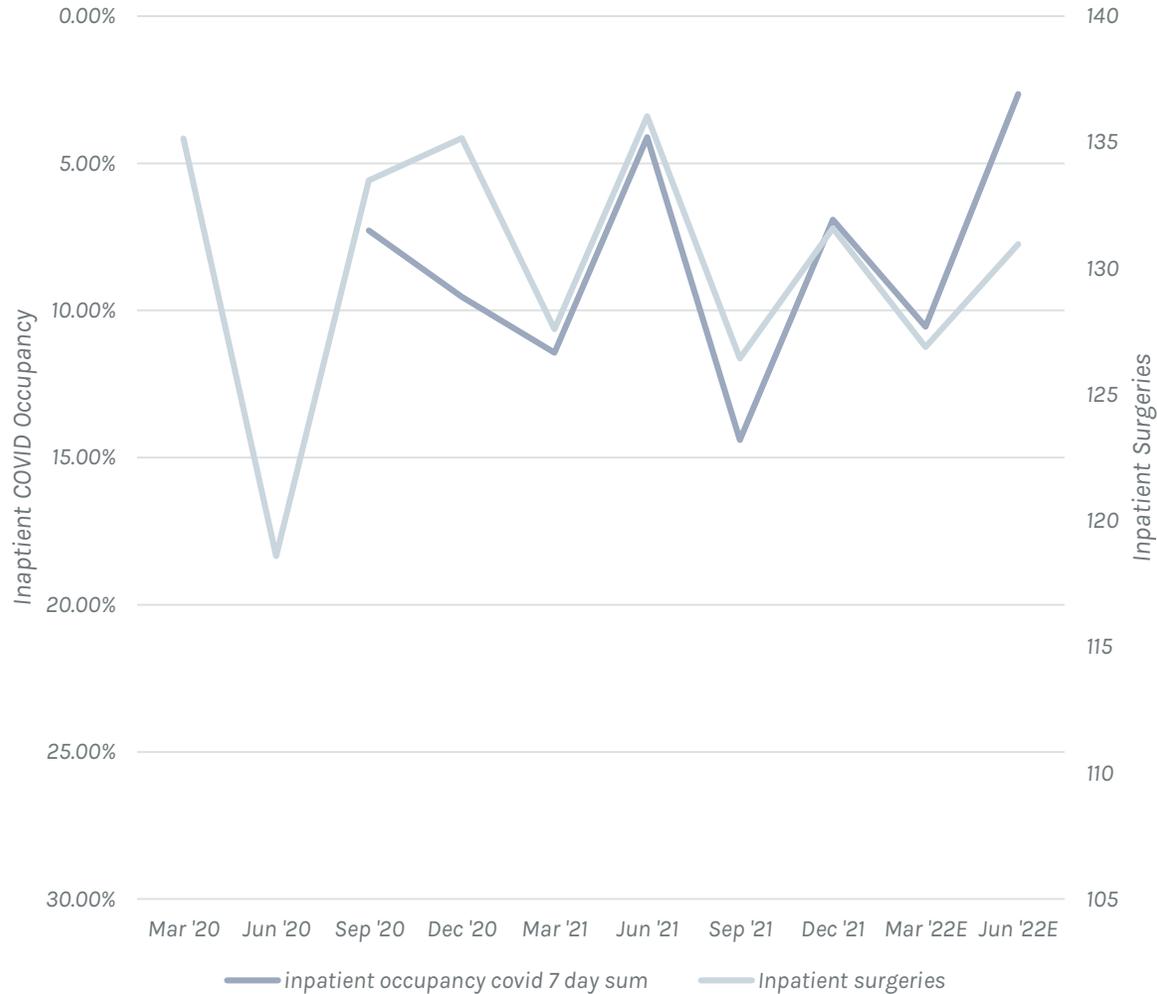
Industry: Psychiatric and substance abuse hospitals
NAICS Code: 6222
Data Type: AVERAGE HOURLY EARNINGS OF ALL EMPLOYEES



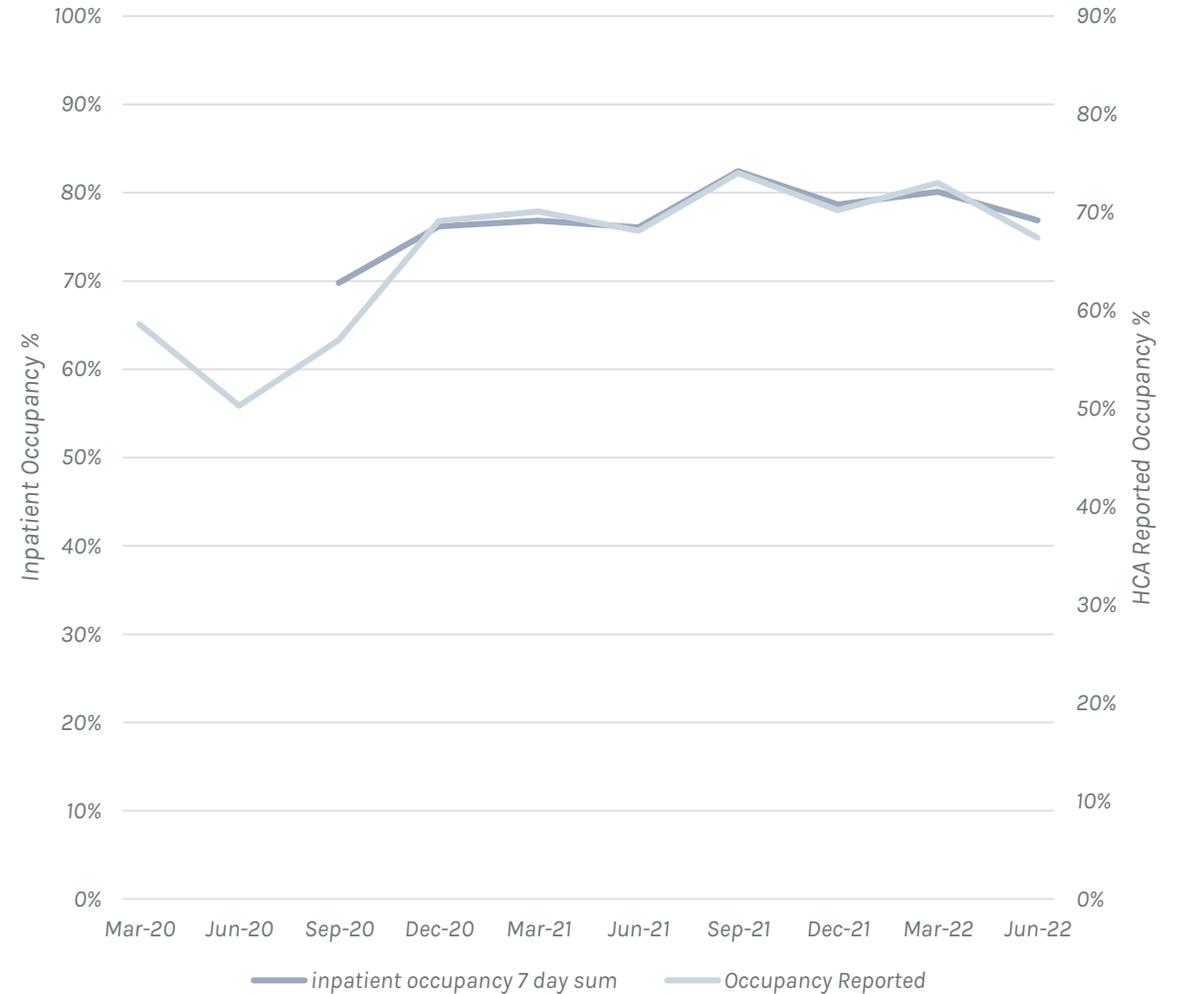
Through May 2022, aggregate weekly hours has turned positive while average hourly earnings are slowing on a 1 year and 2 year basis. The hourly wage hit the lowest level in YTD in May at \$31.49.

HCA Reported Surgery and Occupancy vs HHS Data

Inpatient Surgeries vs COVID Occupancy

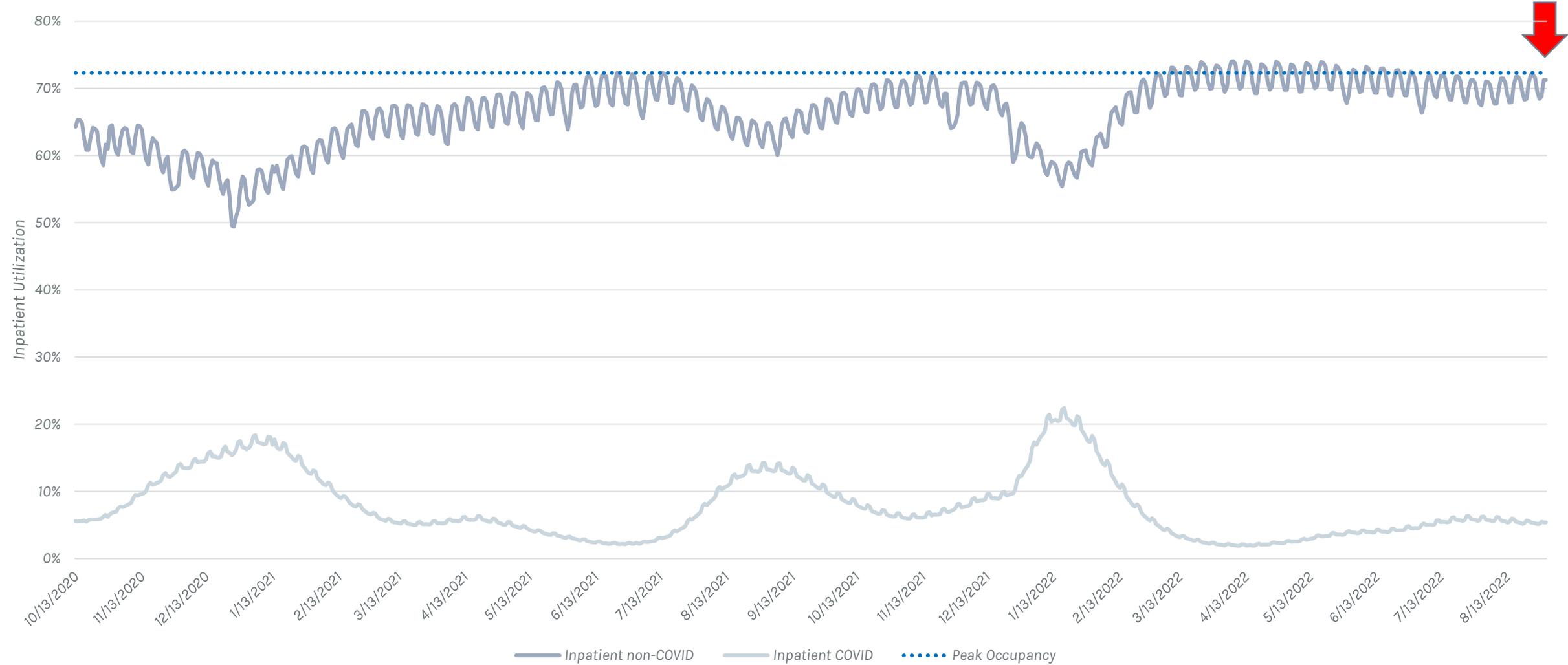


Reported vs Calculated Occupancy



Hospital Non-COVID Occupancy 70.4%

Non-COVID Hospital Occupancy is up +10.9% year over year as of August 31, 2022



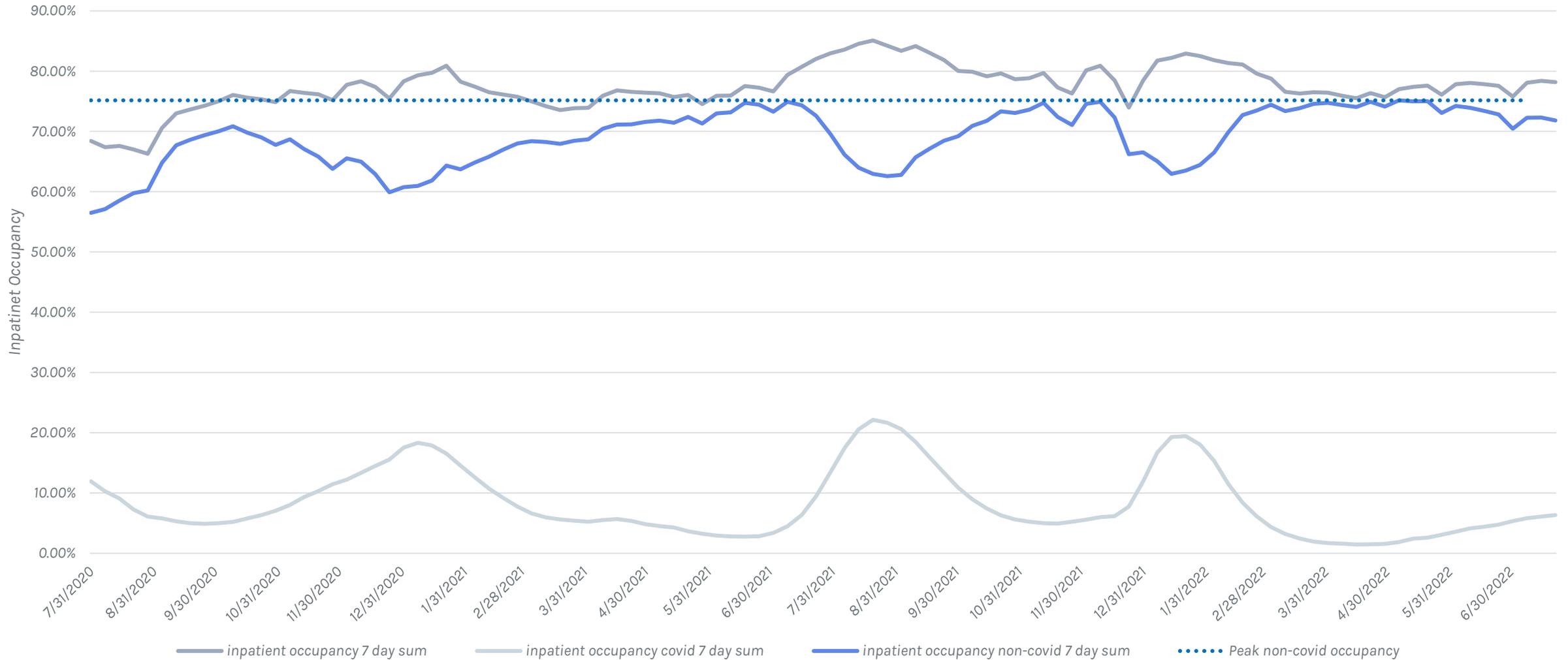
Hospital Non-COVID Diffusion Index

Inpatient Diffusion Index through 7/22/2022 for Short Term Hospitals with over 250 beds



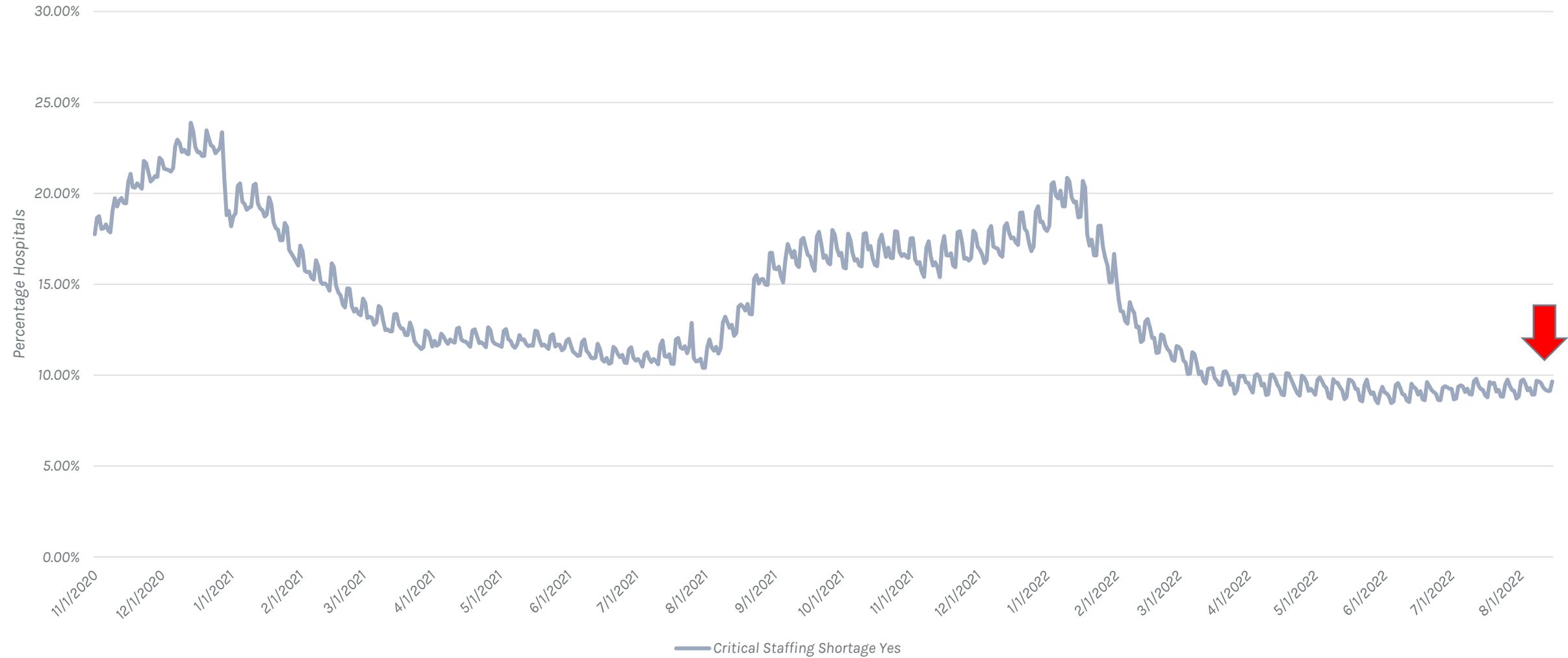
HCA non-COVID occupancy

COVID Occupancy suppressing non-COVID as of 7/22/2022



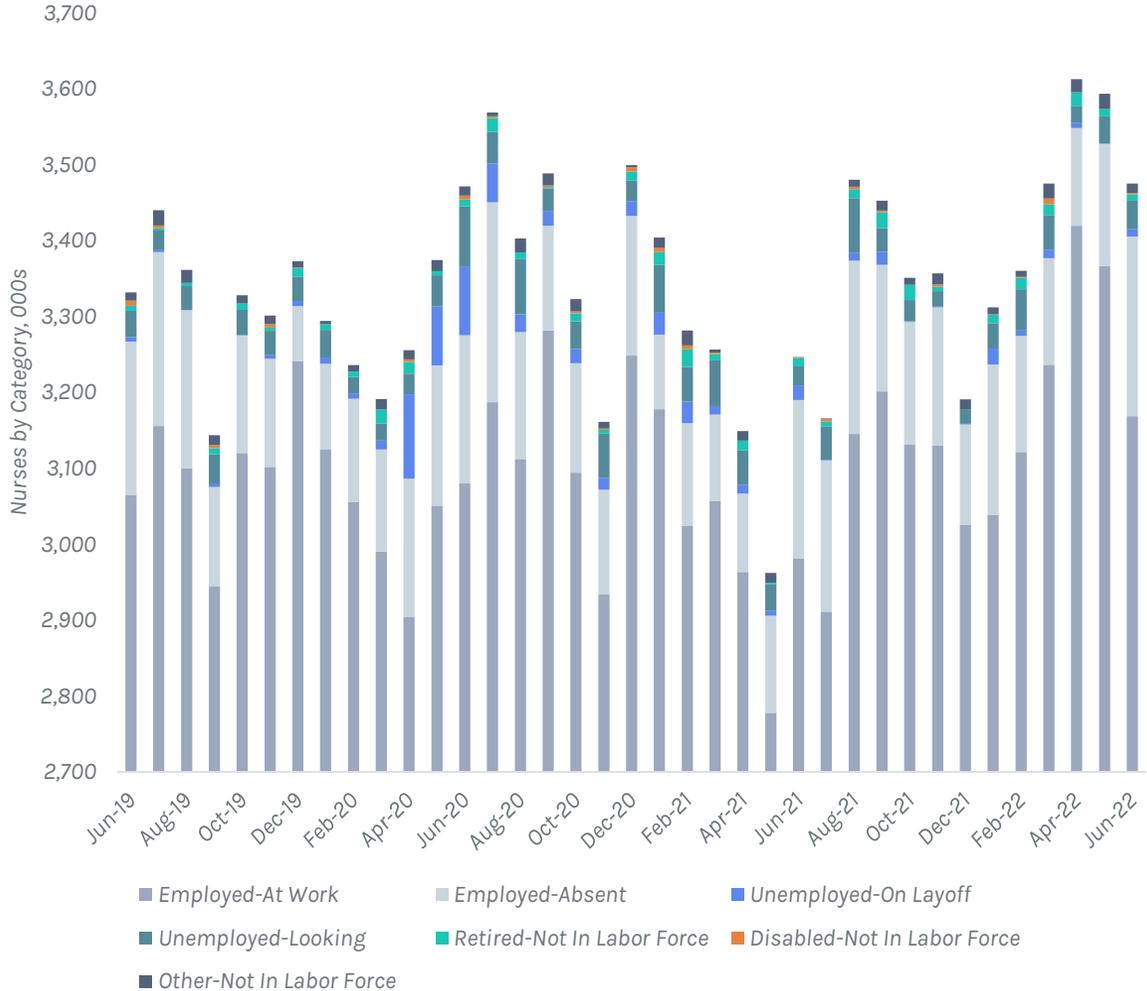
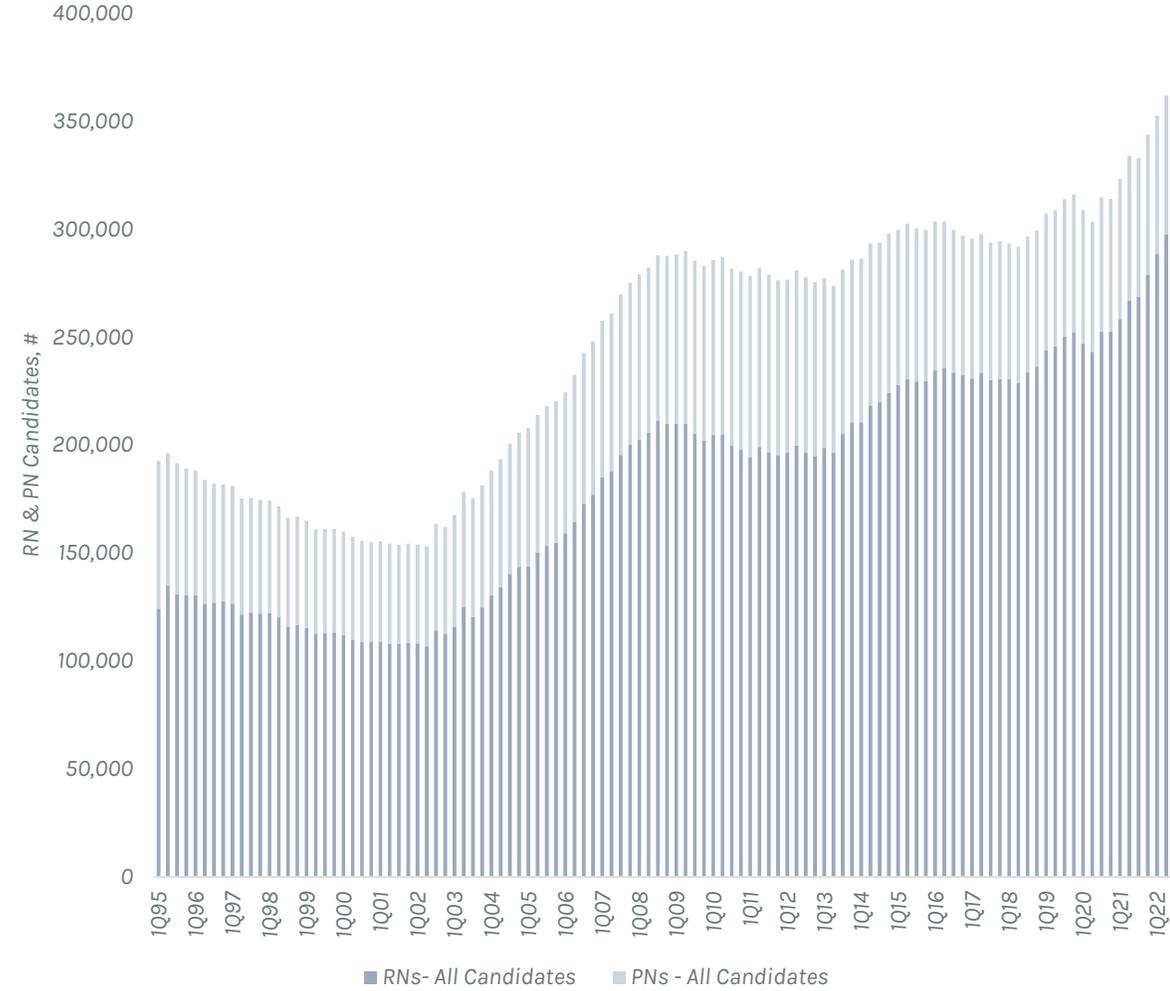
Critical Labor Shortages Remains Low August 2022

HHS has been surveying hospital capacity and labor availability since July 2020



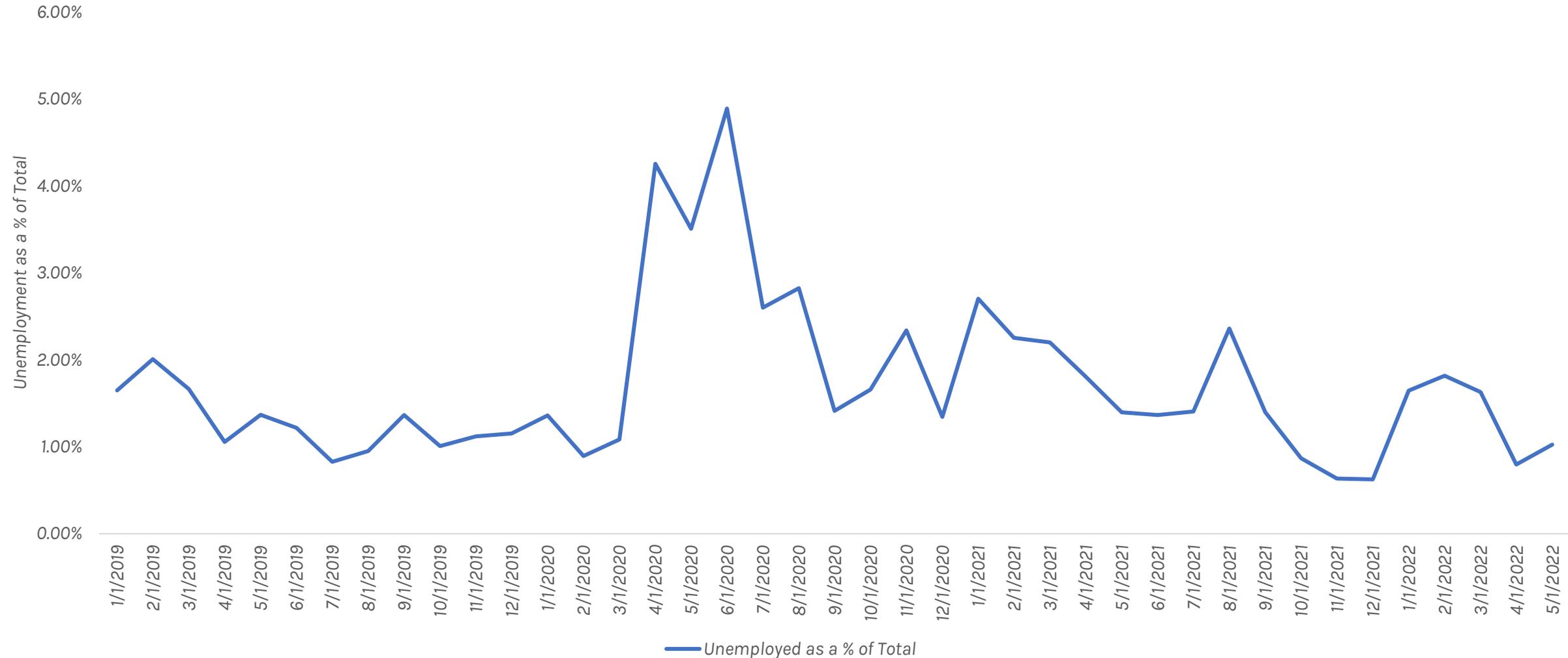
After Some Slowdown, Test Takers are Ramping

New NCLEX Test Passers accounted for 5.7% of the Total Nurse Population in 2Q22



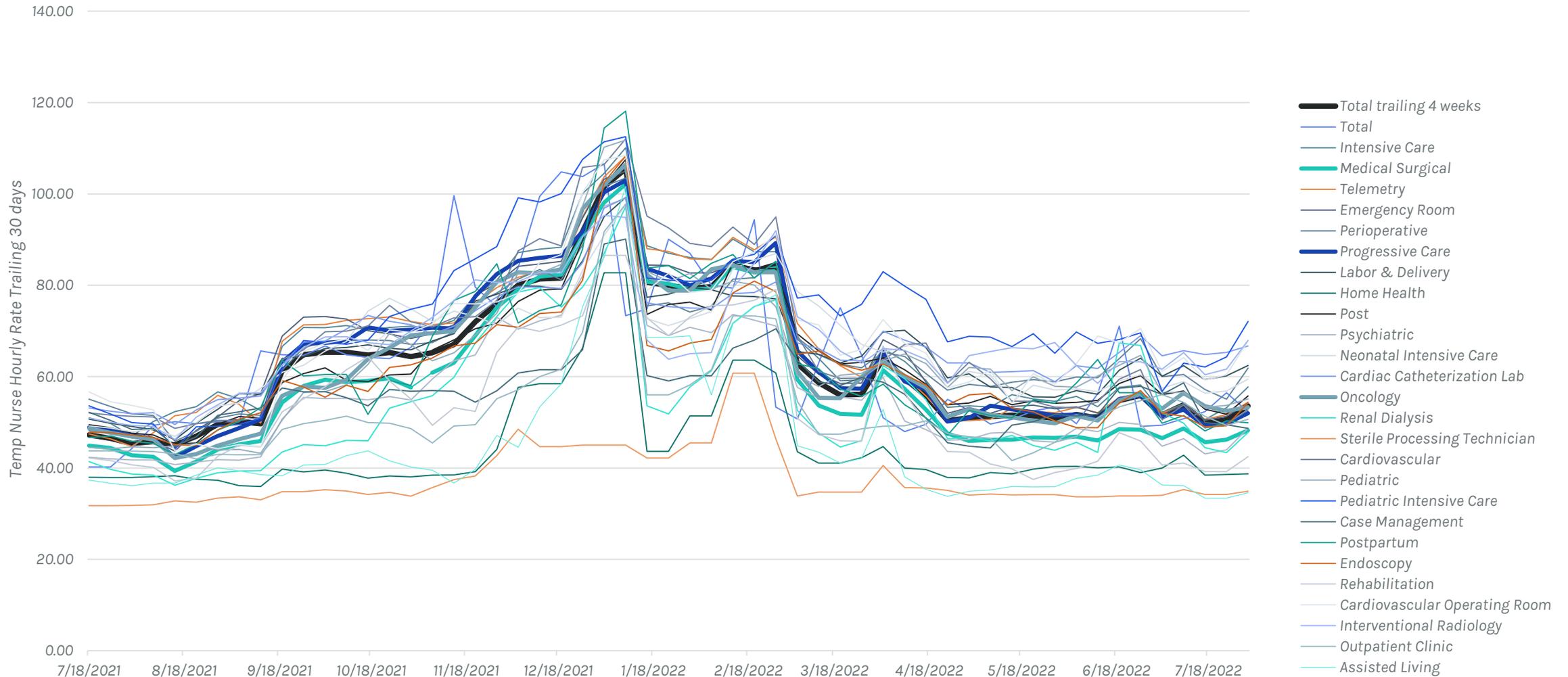
Registered Nurse Employment Status

COVID both suppress supply and creates demand. Labor supply is shaking lose post Omicron.



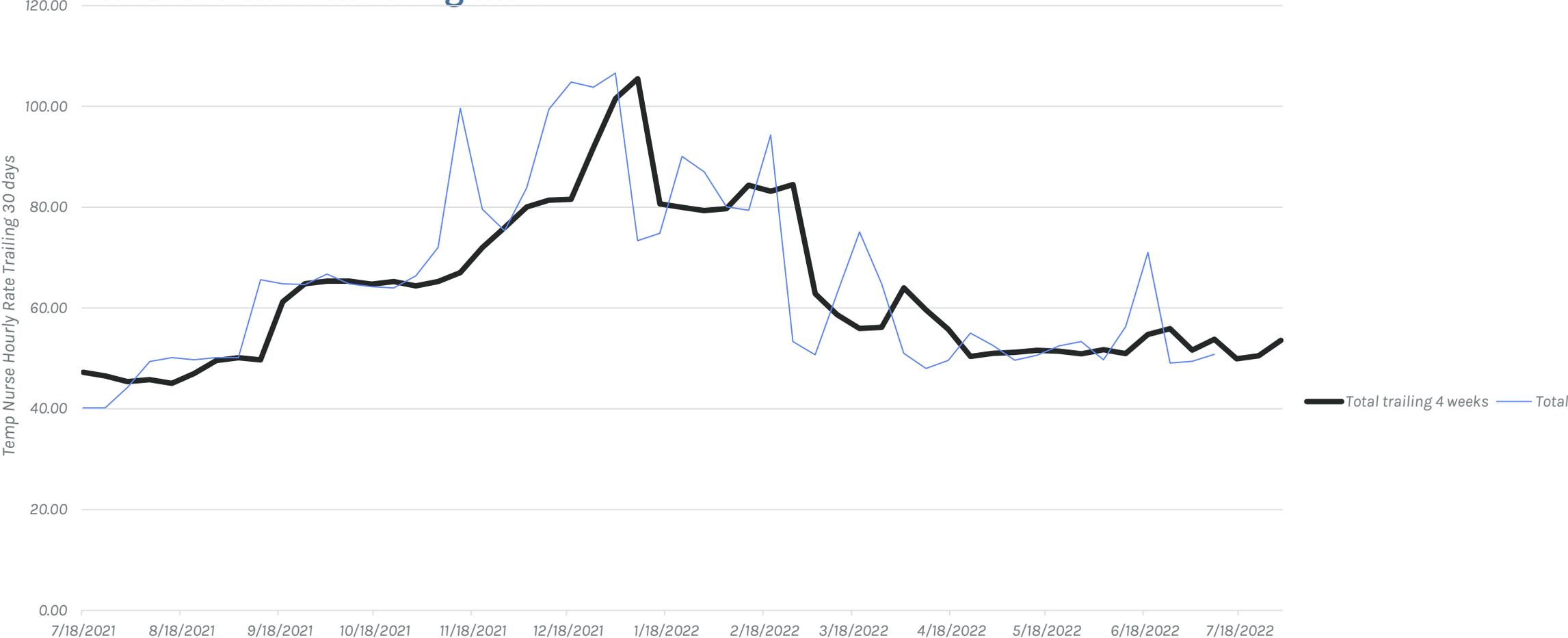
Extremes in Wage Inflation Easing

As of July 31, 2022 our tracker data for spot labor pricing peaked in January, some BA variant demand showing up late in June maybe.



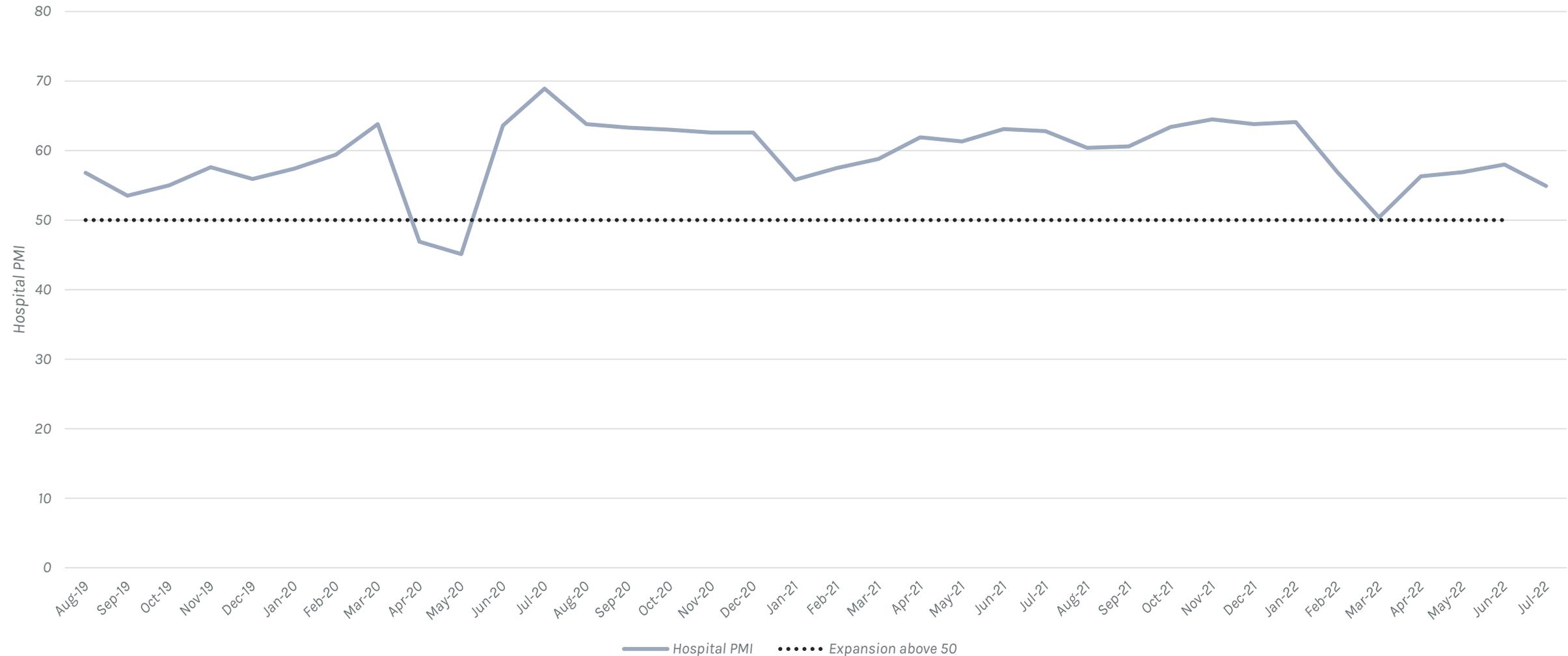
Extremes in Wage Inflation Easing

As of July 31, 2022 our tracker data for spot labor pricing peaked in January and has retraced much of the Delta and Omicron gains.



Hospital PMI - July 2022

Post Omicron bottom in March 2022



80% drop through on the incremental surgical case for the non-COVID volume recovery

On April 13, we spoke with a hospital CFO within a 30+ hospital system about COVID-19 testing, staffing/labor, and general business trends. We last spoke with this contact in January, and **his opinions and feedback help explain how an operator like HCA can navigate COVID waves and “win” in a post-COVID environment.**

Key points:

1. Our contact saw COVID testing drop from ~\$200k estimated cost in January to ~\$50k in March.
2. The average rate for temp staffing (ICU, ER) has dropped from a peak of ~200/hr. to \$140-\$150/hr. but reducing the % of temp staff has not been possible, despite best efforts: “It’s still a really tight market.”
3. While there’s been a decrease in inpatient surgeries, there’s been a “leap forward” in outpatient.
4. Through 1Q22, outpatient visits were up nearly 5% y/y, and our contact thinks that can trend toward +6% to 8%- maybe 10% - over the course of this year.
5. Most systems should be able to handle a 5% uptick in volume with current staff.
6. On incremental case volume, up to 70%-80% or revenue can fall to the bottom line, on average (50% is a good, “appropriately conservative” estimate).

How are your surgeons doing on volume?

- When I speak to surgeons, there’s no “I’m slowing down.” Surgeons do 500-600 cases per mo., and we’ve already got ~350 on the schedule for May.

How’s acuity trending?

- It was ~1.45 to start the year, then it ticked up to 1.47, now its 1.50. Back of the envelope, if that’s \$150/\$200 per admit - 1600 admits, it’s another \$320k through the door just due to sicker patients.

With the consumer – do you have any worries about bad debt? How might this year compare to prior recessions?

- We try to work w/ patients. If someone owes \$2k, can they give us \$500 (for a colonoscopy, can we get about same as Medicare?). Thinking back to 2015, the hospital I was at crushed it. I recall having good years in ‘08-’09 as well. Overall, I’m optimistic - April is going well, 1Q was pretty good. **It’s a good demand environment.**

How important are relationships with independent physician groups?

- It’s super important - you don’t have to pay them; goals may be more aligned. Some of the employed docs don’t care as much. The independents are hard working, and we want to get as many of their patients in, let them know we appreciate it, etc. **If you need to employ them, you’re likely doing it as a defensive move.**

How are labor/temp rates trending?

- In surgical and GI suites, the rates are much lower than Med-Surg and ICU/ER; there’s not as much demand.
- \$138-\$145 recently - the rates have really compressed - Med surge was \$160, and the others were near \$200.

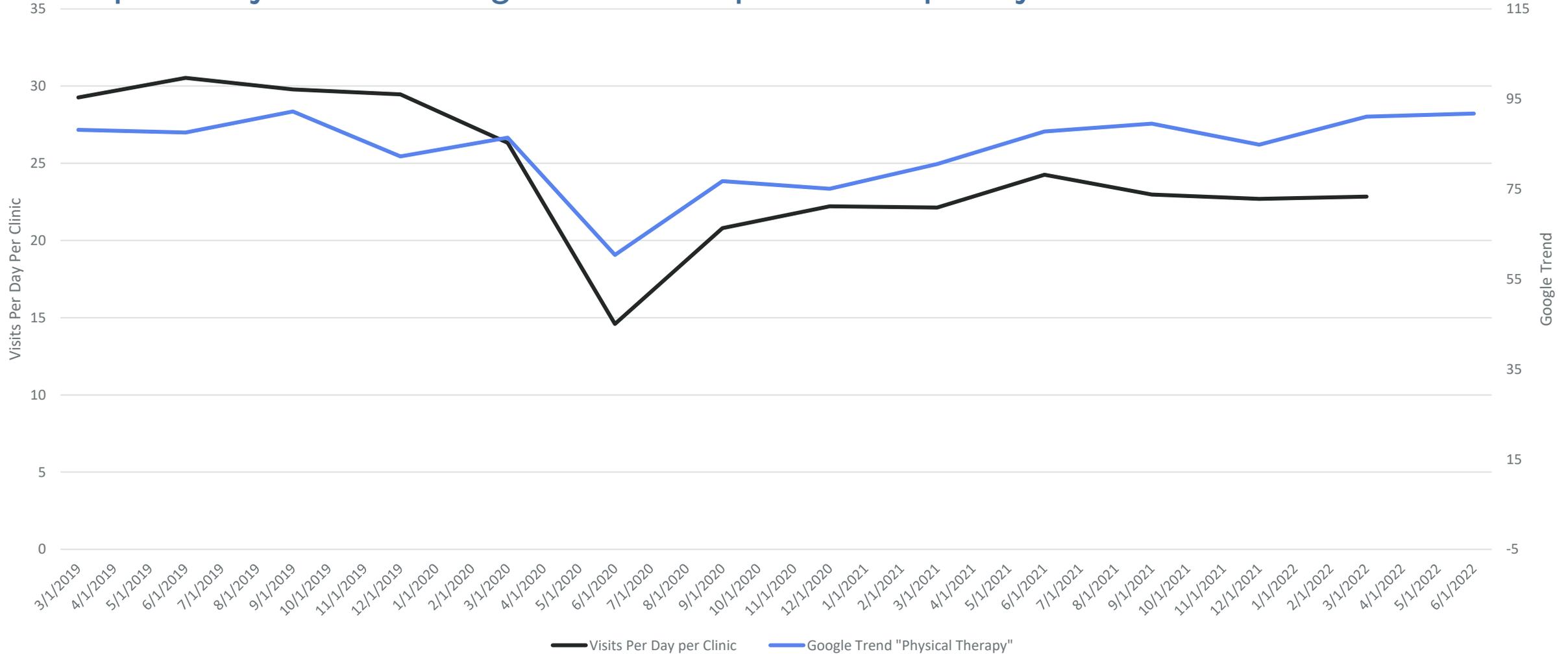
If you can add procedures because COVID is falling off or otherwise, how much of that falls to the bottom line?

- On incremental cases - up to 70%-80% can fall to the bottom line.

Q&A Highlights

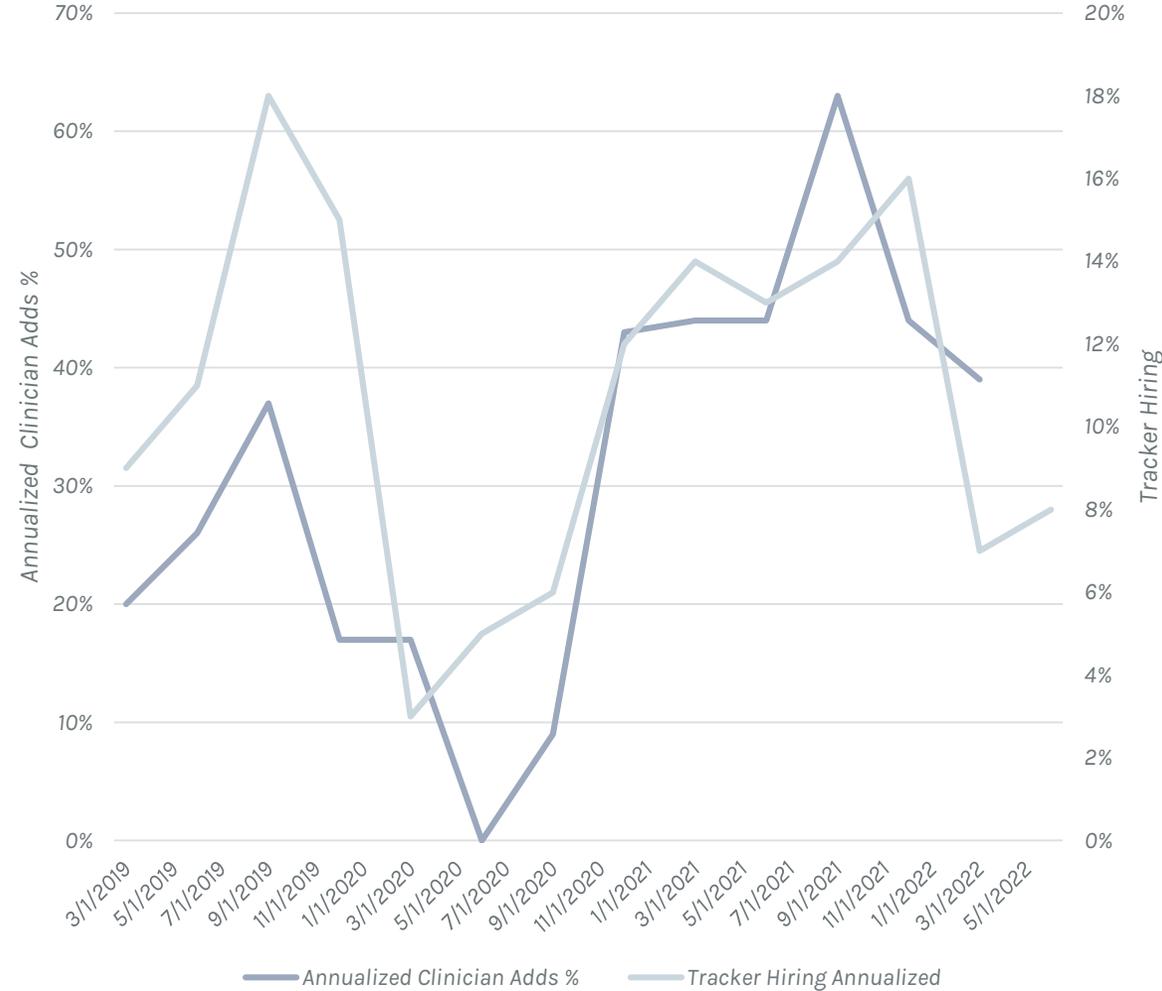
ATIP Visits Per Day vs Google Trend

Google Trend “Physical Therapy” vs Visits per day or patient visits divided by operating days. We had previously shown our Google Trend lines up with visits per day.

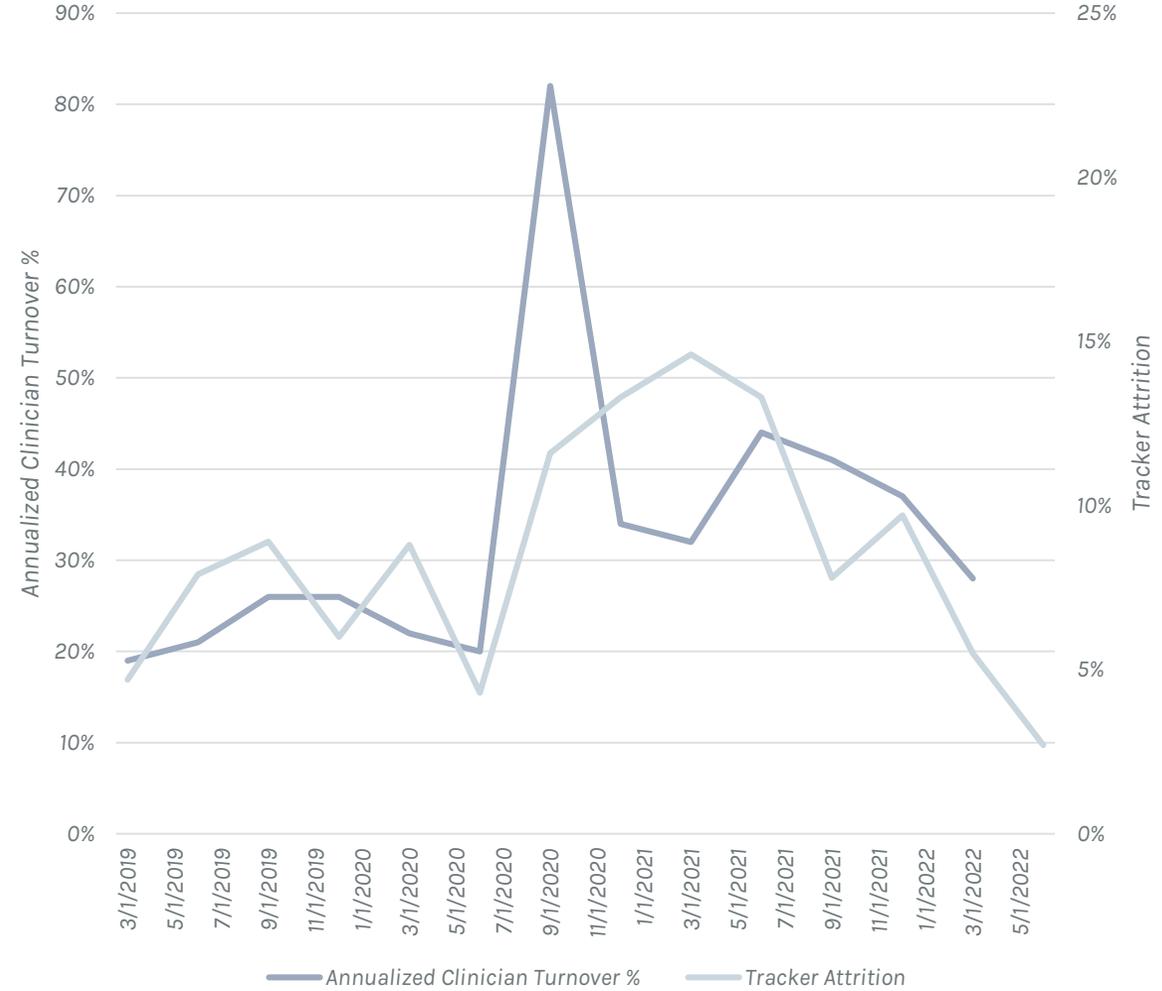


ATIP Tracker May 2022

Hiring Picks Up In 2Q22

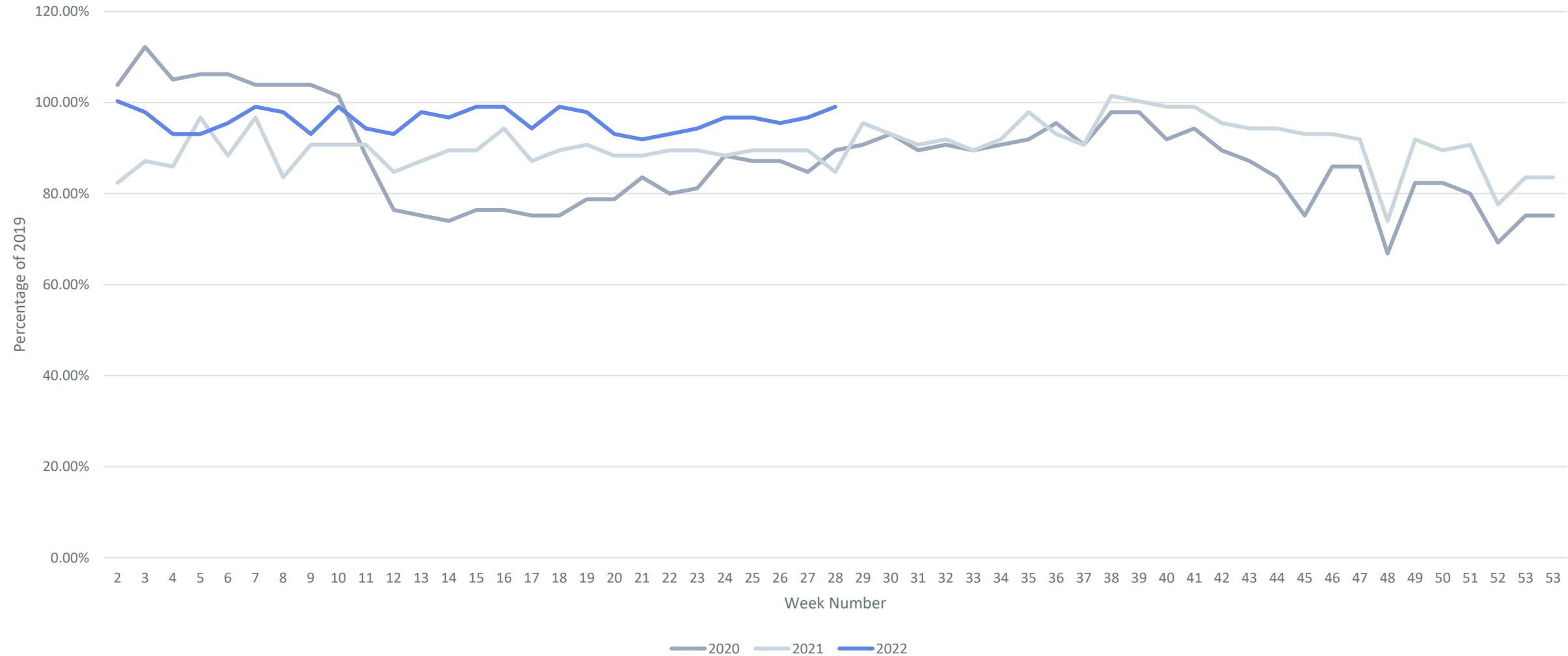


Attrition Improving



Physical Therapy Demand Accelerating

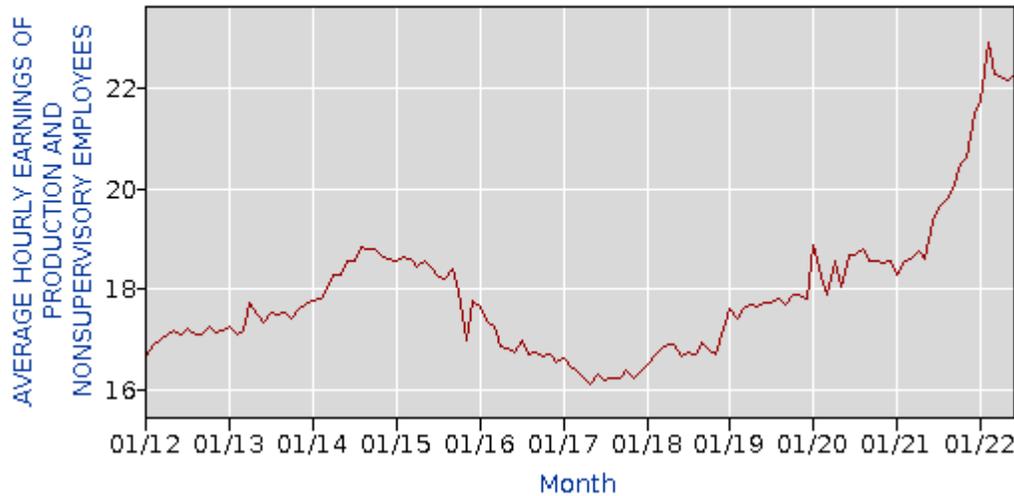
Google Trend for 'Physical Therapy' is back to even with 2019, and up year over year



EYE | Unfavorable Optical Goods Operating Trends

Average Hourly Earnings

Industry: Optical goods stores
NAICS Code: 44613
Data Type: AVERAGE HOURLY EARNINGS OF PRODUCTION AND NONSUPERVISORY EMPLOYEES



Aggregate Weekly Hours -1%

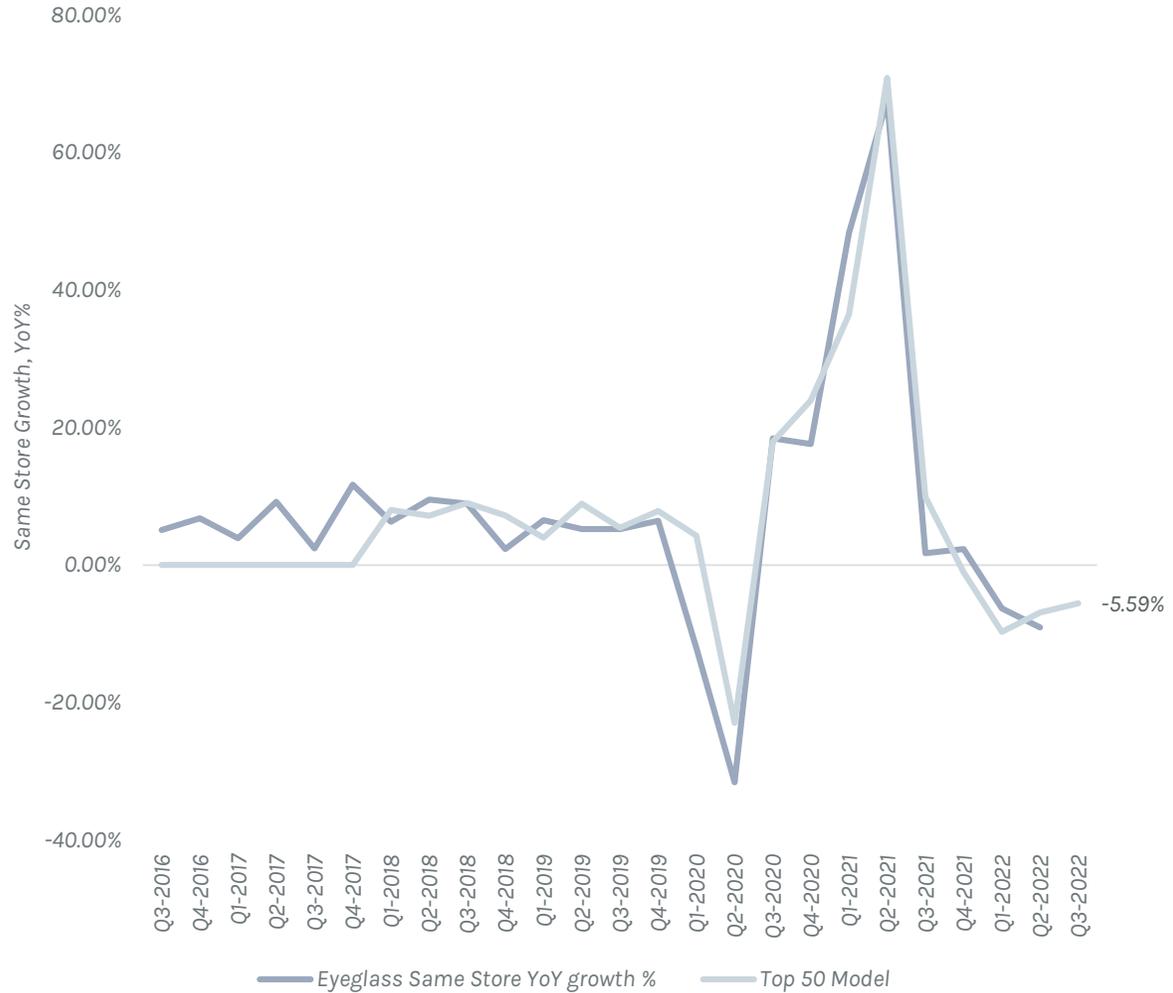
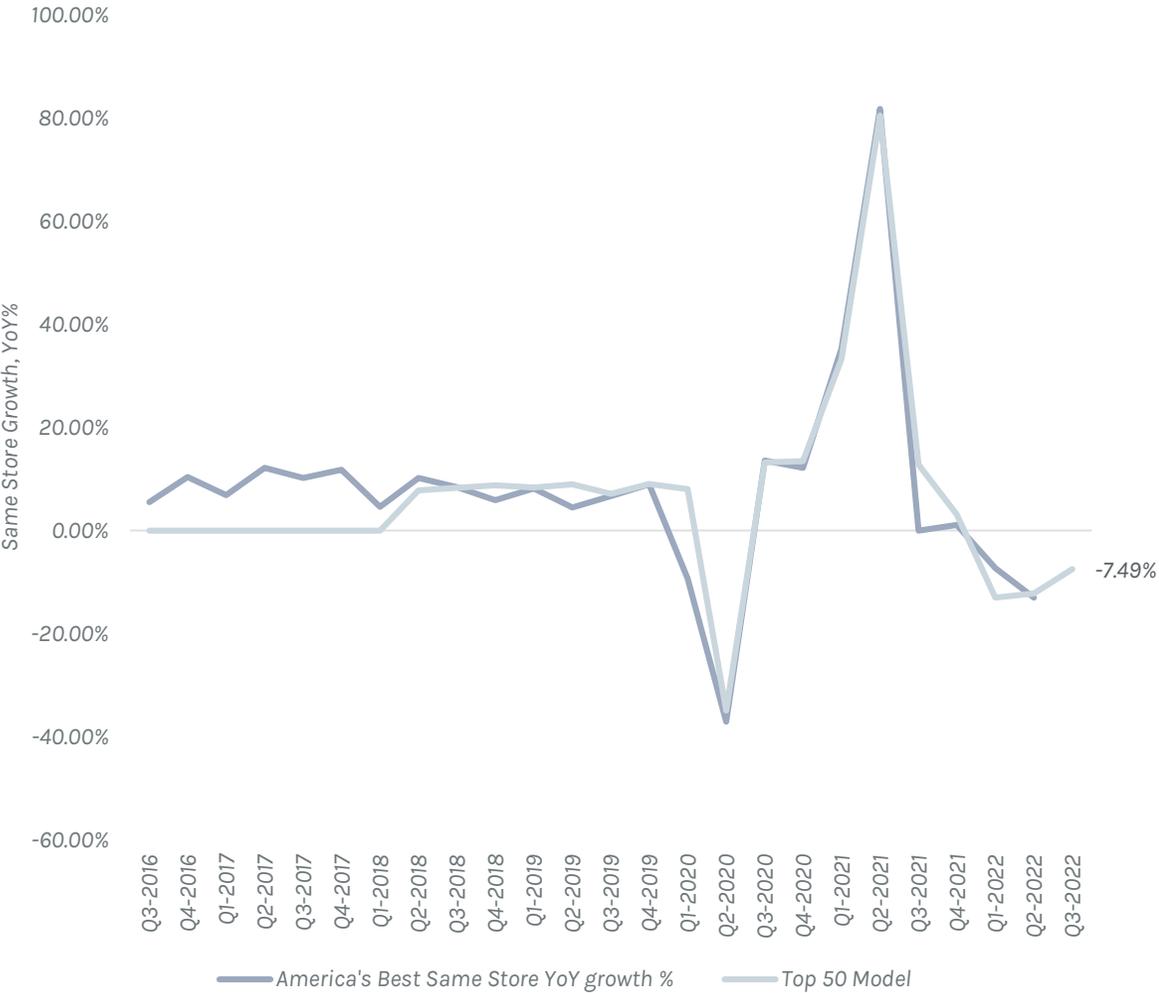
Industry: Optical goods stores
NAICS Code: 44613
Data Type: AGGREGATE WEEKLY HOURS OF PRODUCTION AND NONSUPERVISORY EMPLOYEES, THOUSANDS



June 2022

America's Best & Eyeglass World Same Store Growth, YoY%

Forecast Algorithm predicts sequential improvement for both brands, but below consensus YoY

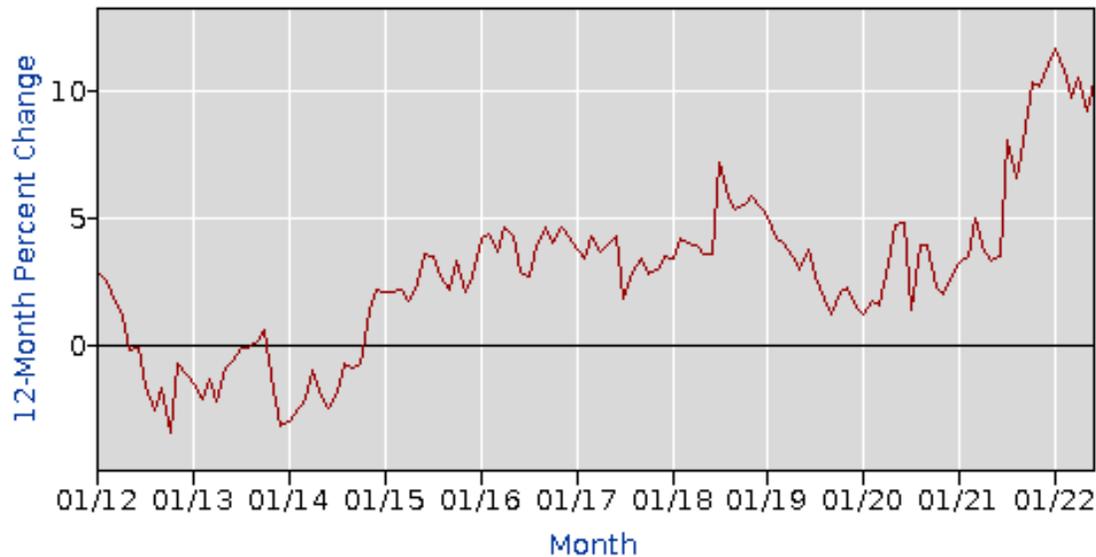


Lifescance High Attrition Risk

Tracker and anecdotes have been negative

	12/13/2021	1/11/2022	2/2/2022	3/3/2022	3/31/2022	5/5/2022	6/2/2022	7/6/2022	8/4/2022
Date of Addition	5036.00	124.00	81.00	381.00	180.00	280.00	214.00	254.00	259.00
Inactive		43.00	98.00	225.00	523.00	111.00	113.00	129.00	102.00
Total	5036.00	5117.00	5100.00	5256.00	4913.00	5082.00	5183.00	5308.00	5465.00

Industry: Outpatient mental health centers
NAICS Code: 62142
Data Type: AVERAGE HOURLY EARNINGS OF PRODUCTION AND NONSUPERVISORY EMPLOYEES



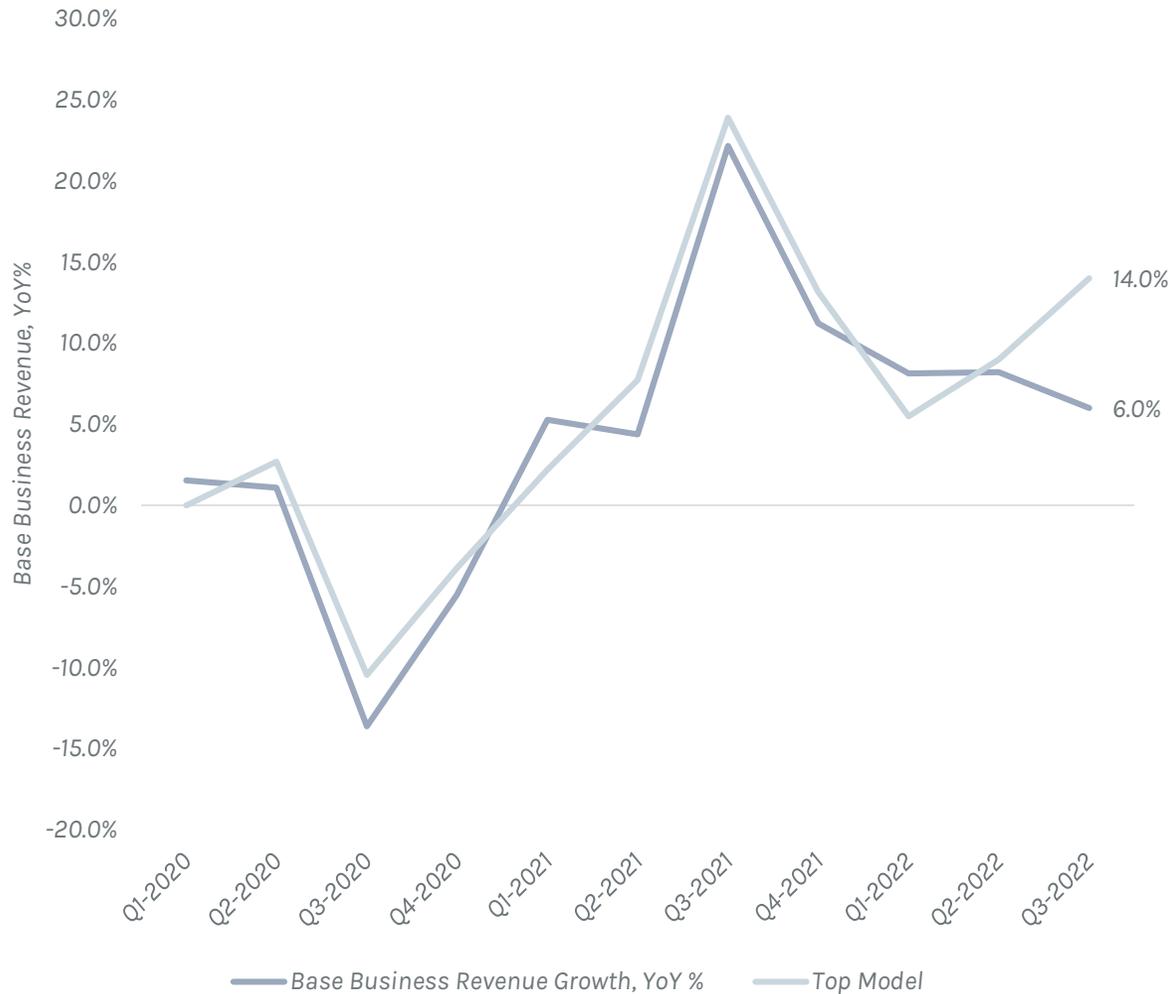
Tracker Comments

- LFST lost 102 professionals versus a gain of 259, netting 157 month over month
- We've spoken with several former employees, some of which were at a practice at the time of a Lifescance acquisition
- Reports of management problems and retention are consistently negative
- In the current high demand and accelerating wage environment, we expect continued topline and margin pressure
- Management spoke to increased spending to recruit and retain staff on their 2Q22 earnings call, but claims they are not seeing wage inflation despite wage readings of 10%

Update through August 2022

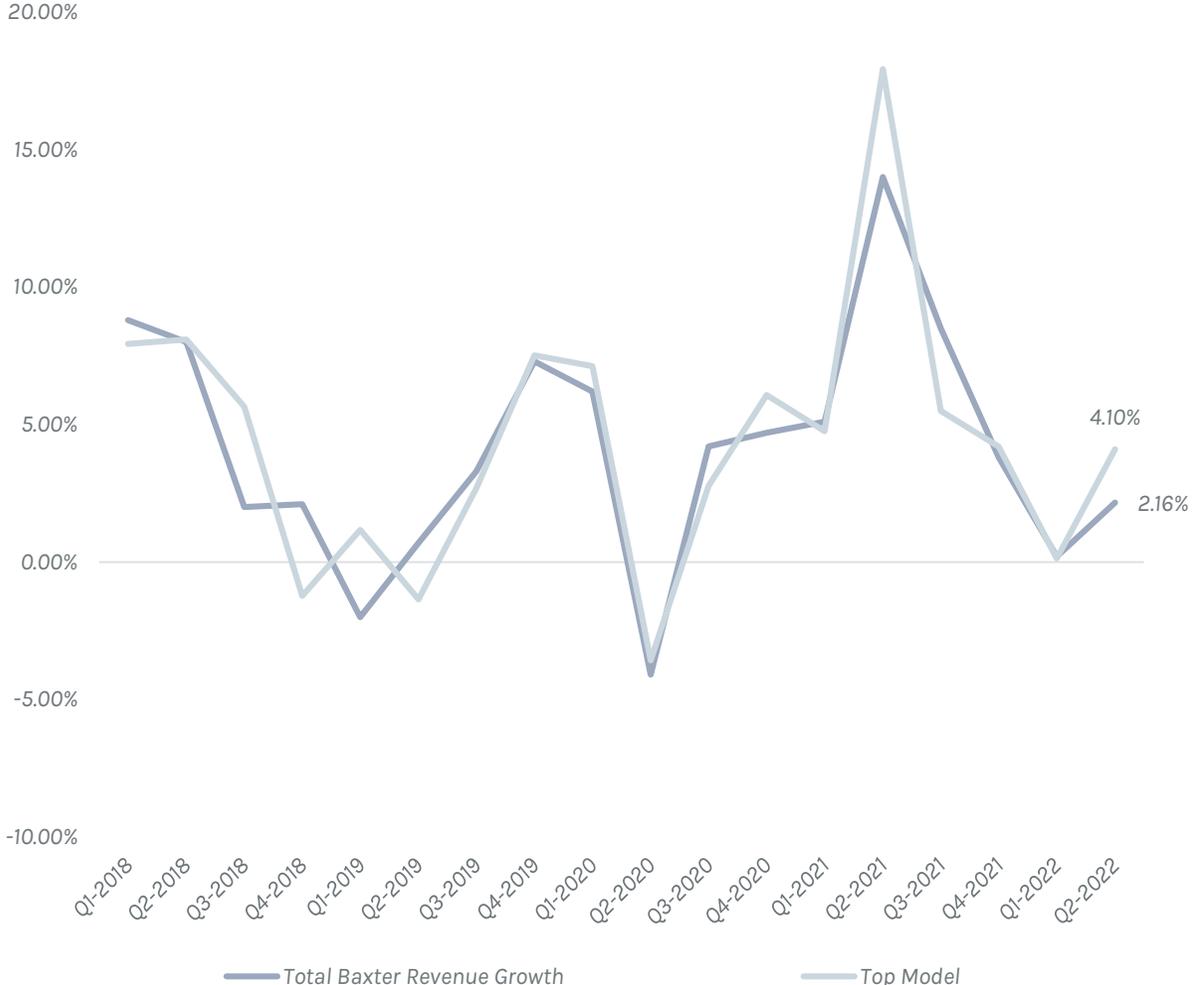
Forecast Algorithm | Base Business Revenue Growth, YoY %

BDX Reported Base Business Revenue Growth of 6.0% YoY, Slightly Below our Top 50 Model Forecast

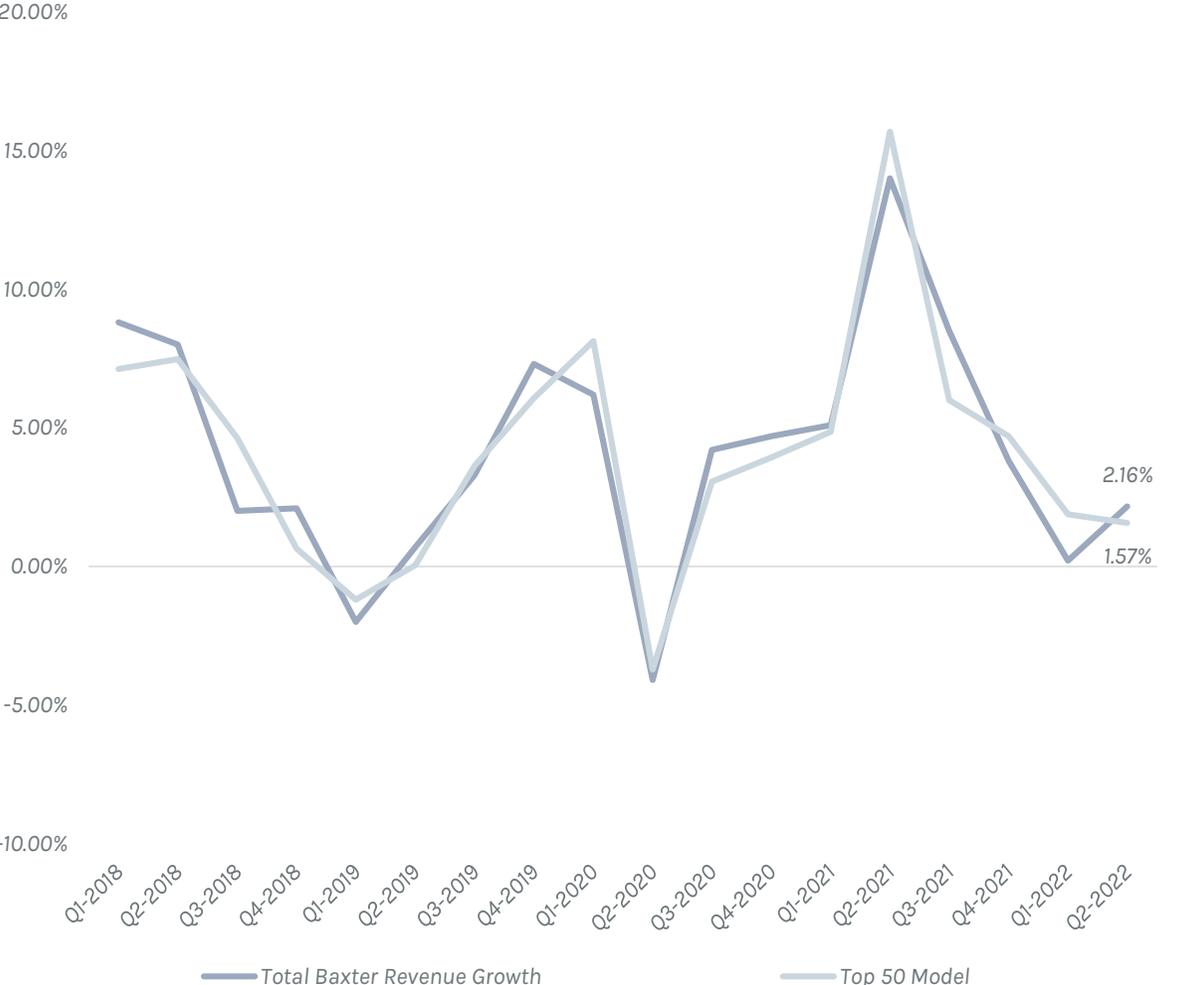


Forecast Algorithm | Total Baxter Revenue Growth, YoY%

Reported: 2.16% versus Top Model: 4.10%



Reported: 2.16% versus Top Model: 1.57%



UroLift is a Key Driver for Top-Line Growth

Management guided to 15% YoY growth for the high growth portion of the portfolio



UroLift® 2 System



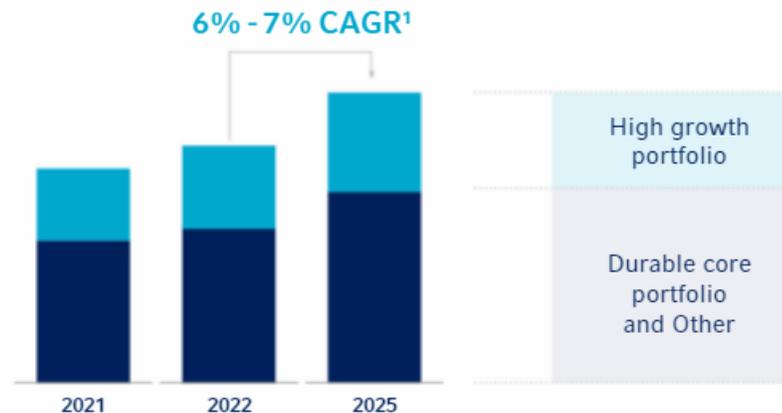
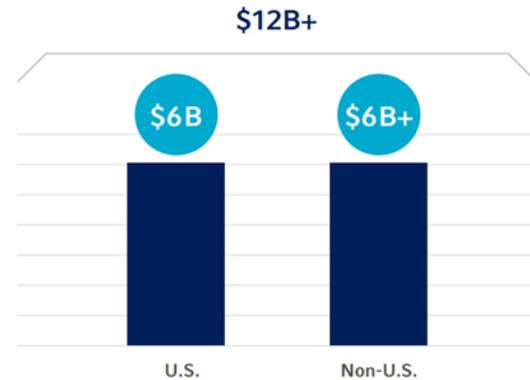
UroLift ATC® Advanced Tissue Control System

UroLift 2 System

- UroLift is the sole product in TFX's interventional urology segment and a key driver to the high growth portfolio.
- UroLift is a small implant that treats benign prostatic hyperplasia (BPH) in men. The implantation is an outpatient, short-term procedure which is completed in less than an hour at a physician's office or ASC.

High Growth Portfolio
~\$700M in 2021 Revenue

5% Penetration of Global Addressable Market¹



UroLift Geographic Expansion

- Brazil
- China
- France
- Germany
- India
- Italy
- Japan
- Spain
- Taiwan

International Expansion (UroLift)

- The focus in FY22 is to transition physicians in the US that are using the UroLift 1 System to the UroLift 2 System by the end of the year and continuing to grow in the US.
- For FY23, management intends to turn their focus to the launch and market penetration in China.
- After which, Italy and Spain will be countries of focus within Europe and Japan will be in Asia.

Assumptions

- High growth portfolio: 14-15% CAGR¹
- Durable core portfolio: 4-5% CAGR¹
- Other²: (6-7%) CAGR¹

LT Guidance for Portfolios

- As shown on the previous slide, the high growth portfolio, which contains UroLift, makes up roughly 25% of the total product portfolio.
- Management has commented that their outlooks of 15% growth in FY22 will be multi-faceted and not relying on one product.
- However, UroLift is expected to be a large percentage of this growth and is "playing out as expected, slightly above internal estimate."

Proactive Approach Should Fend Off Headwinds

TFX invested \$48MM to reinforce their supply chain beginning before the pandemic



End-to-End Supply Chain Assessment
>\$48M invested from 2018-2021 to increase supply chain redundancy/flexibility



Advanced Analytics
Global Command Center



Net Promoter Score (NA)
~15% Improvement Q4 2021 compared to Q4 2020



21
distribution centers



~ 2M Sq. ft.
manufacturing space



~9,000¹
employees



1,500+
suppliers



~\$1B
in spend

Early Results from Investment

1. TFX began proactively making adjustments prior to the pandemic. **These investments yielded a 15% improvement in NPS in 2021.**
2. Key moves include management's \$48MM investment to build TFX's current supply chain resilience and develop a global command center to track inventory by product line.

Additional Takeaways

1. TFX has very limited exposure to the chip shortage, as **only 2 products require a chip.**
2. **TFX does not manufacture in China.** On the call, they explained that it isn't an issue of getting product out of the country but getting product into the country.

Investor Day Comments on Supply Chain Disruptions

“The challenges that we see are predominantly freight costs and the time to move product, in particular, from Asia to Europe and the United States. The time lag to bring product on the ocean has grown quite considerably. That has a knock-on effect with some of your resin suppliers, are also moving product through sea lanes, and they're actually raising some price pressure there.”

Cost Improvement Program Exceeded Inflation

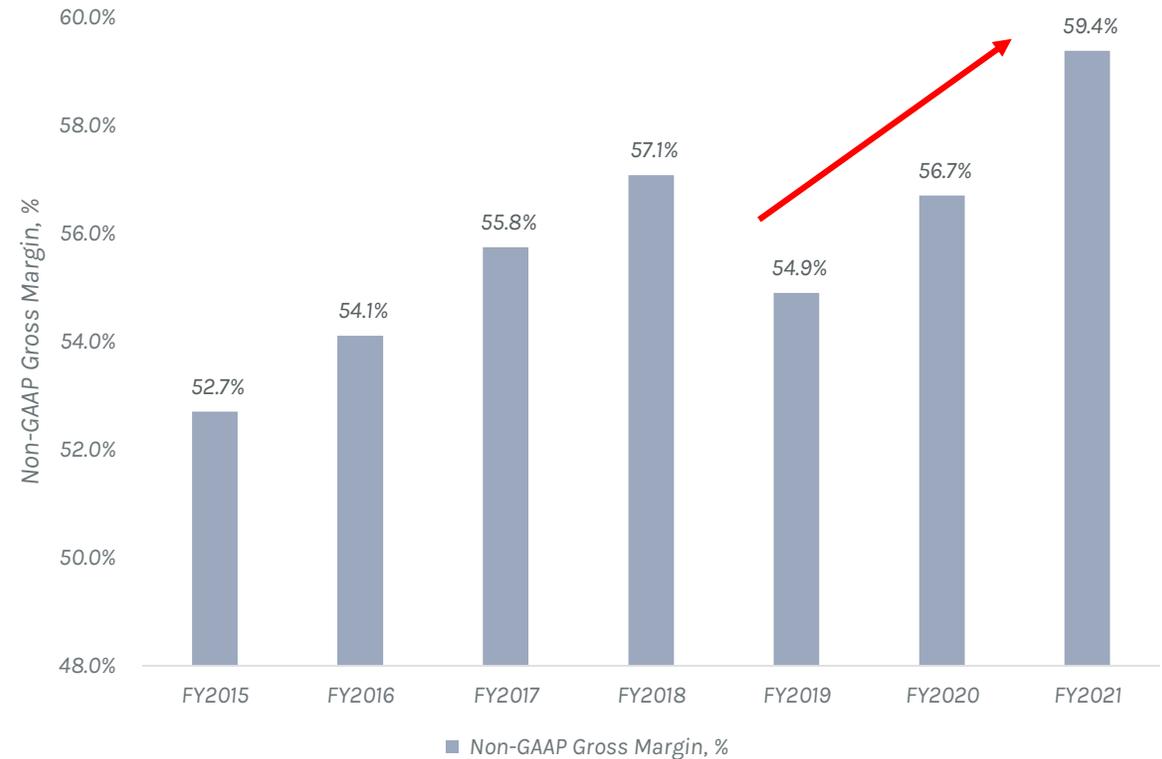
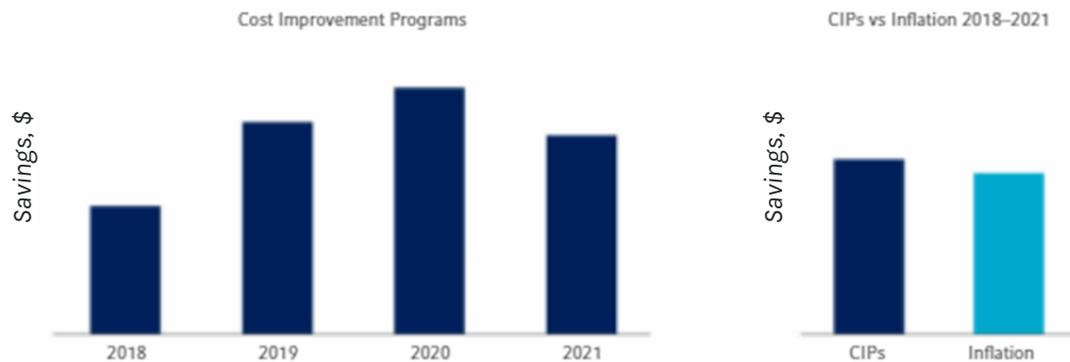
TFX has successfully offset previous inflation through their cost improvement programs.

~80% of revenue sourced from geographies that are optimized for Teleflex's cost structure by 2025

\$24-\$28M¹ in savings from existing restructuring programs between 2023-2025
 • \$125M delivered by year end 2021

1,000+ headcount transferred

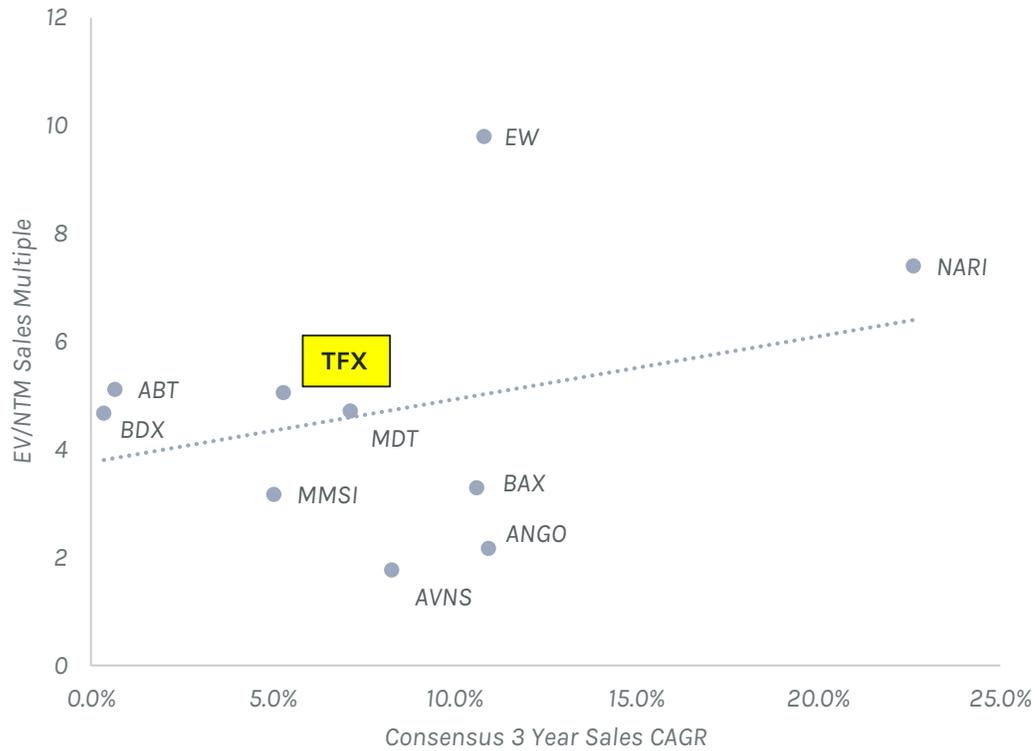
\$100M capital investment



Laid out during the Investor day, the company expects that margins will be positively affected by a 200 bps tailwind from the shift in mix to higher margin products and an additional 70 bps from current restructuring plans. They expect to nullify all remaining inflation through additional improvements in top-line sales and product mix.

Relative Analysis | EV/NTM Sales

Despite similar multiples, TFX offers greater sales growth opportunity than peers

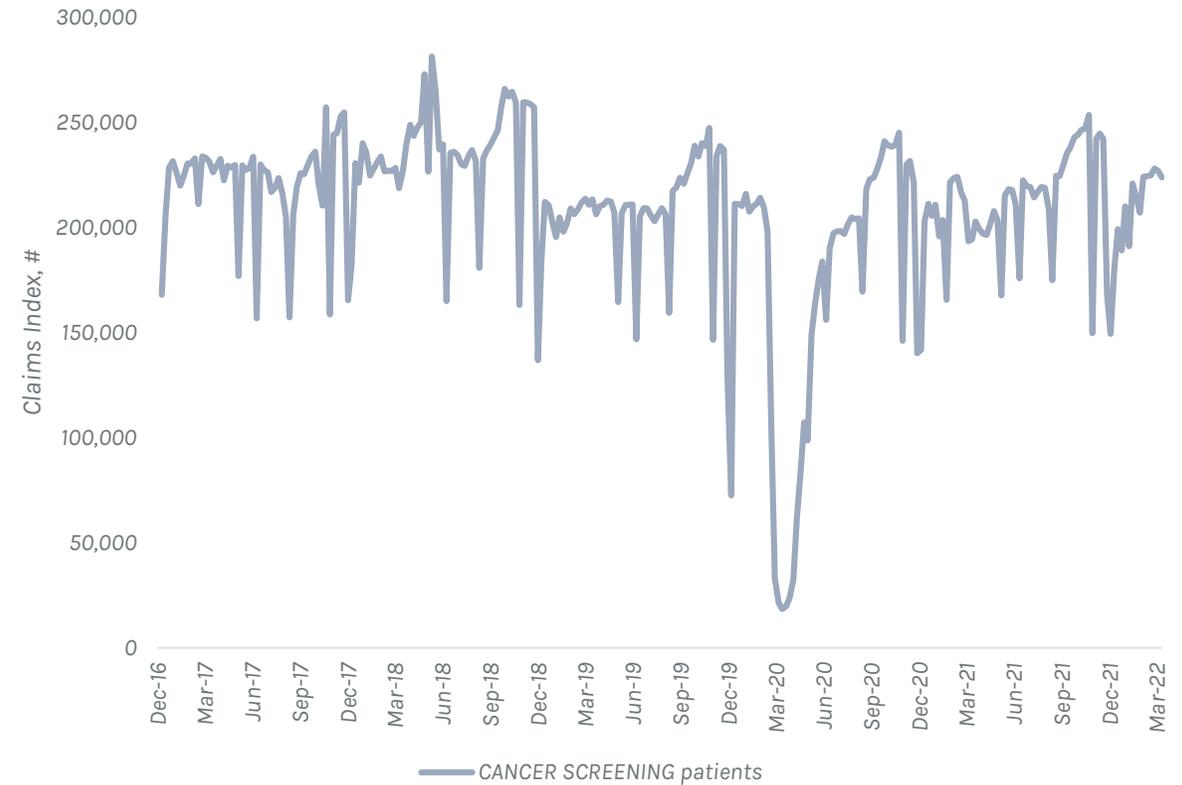
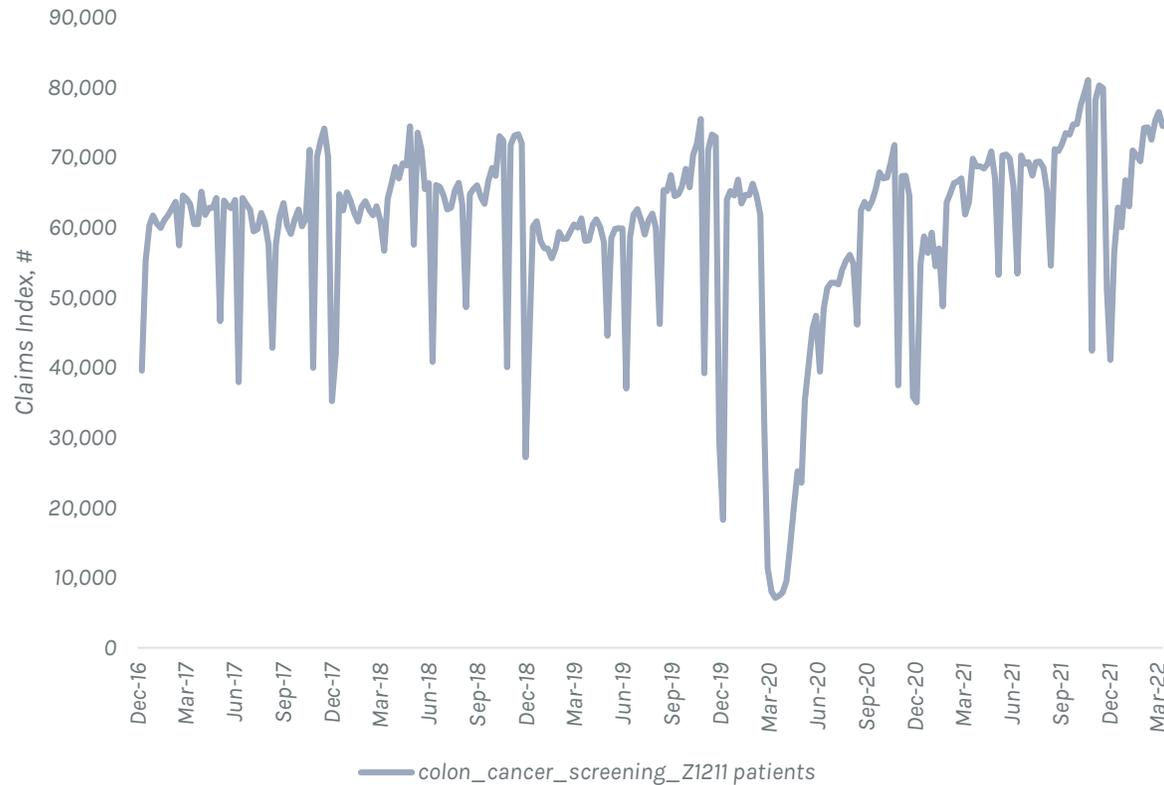


Ticker	Company Name	Mkt Cap	Consensus 3 Year Sales CAGR	Current EV/NTM Sales
TFX	Teleflex Incorporated	13,371.7	5.3%	5.06x
ABT	Abbott Laboratories	199,204.7	0.7%	5.12x
MDT	Medtronic Plc	141,653.1	7.1%	4.72x
BDX	Becton, Dickinson and Company	73,389.9	0.4%	4.67x
EW	Edwards Lifesciences Corporation	58,780.4	10.8%	9.8x
BAX	Baxter International Inc.	37,210.8	10.6%	3.29x
MMSI	Merit Medical Systems, Inc.	3,345.3	5.0%	3.17x
NARI	Inari Medical, Inc.	3,231.6	22.6%	7.4x
AVNS	Avanos Medical, Inc.	1,296.2	8.3%	1.77x
ANGO	AngioDynamics, Inc.	731.0	10.9%	2.17x

While TFX has moved to the bottom of its historical EV/NTM Sales range, it offers a better top-line growth profile than other large cap, medical technologies names like Abbott (ABT) and Beckton, Dickinson and Company (BDX).

Claims Data | Volume Recovery + for High Growth Portfolio

After Omicron- related halt, regular cancer screening looks to have returned to pre- COVID levels

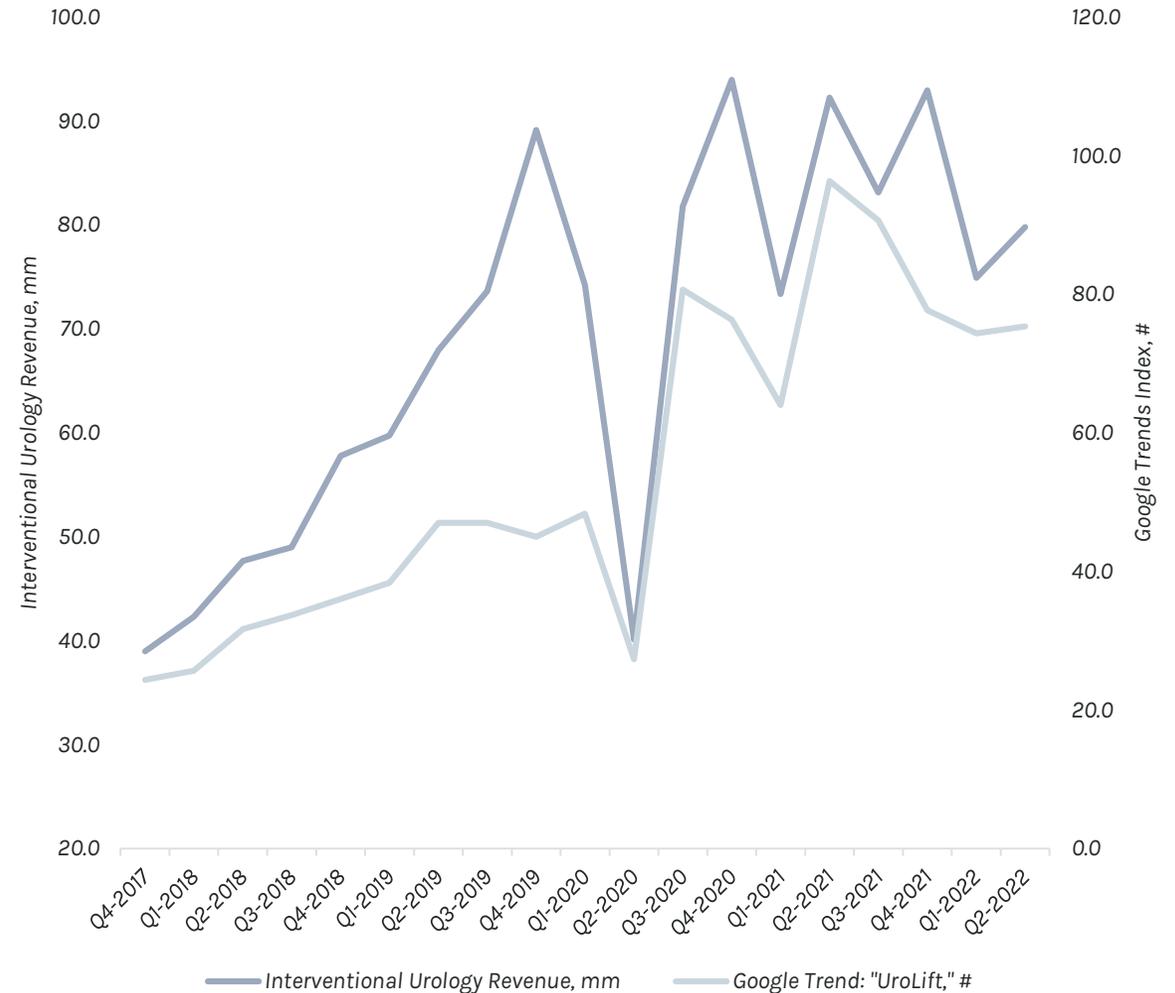
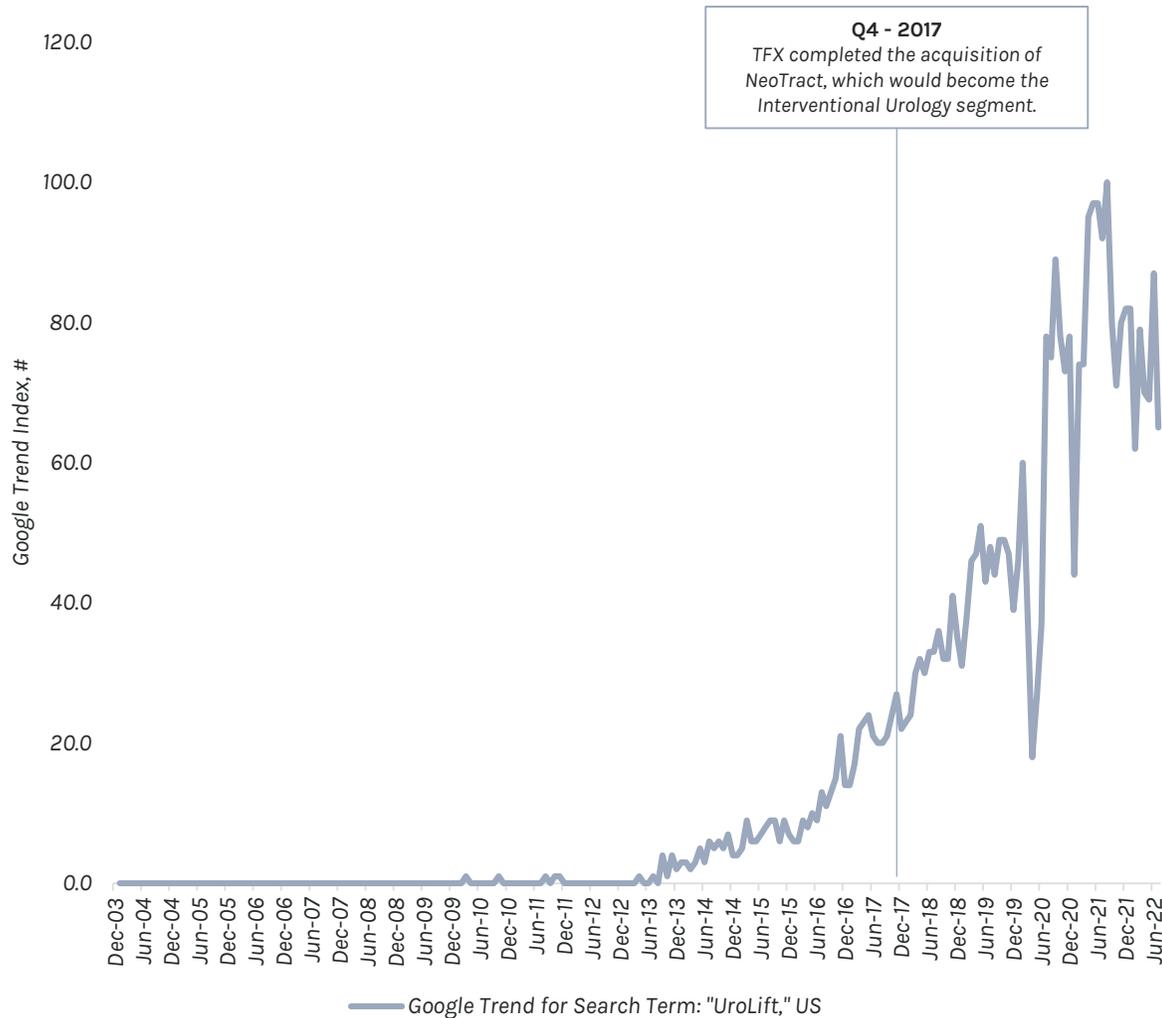


The claims data shows that cancer screening dropped off in mid-December as a result of the latest COVID breakout. Following this surge, volumes trended positively and look to be at or above pre-COVID levels.

Claims data for cancer screening is relevant as the pattern of behavior for a screening visit leading to surgery is aligned with the majority of TFX's products. TFX does have a minority of oncology-related devices in their portfolio.

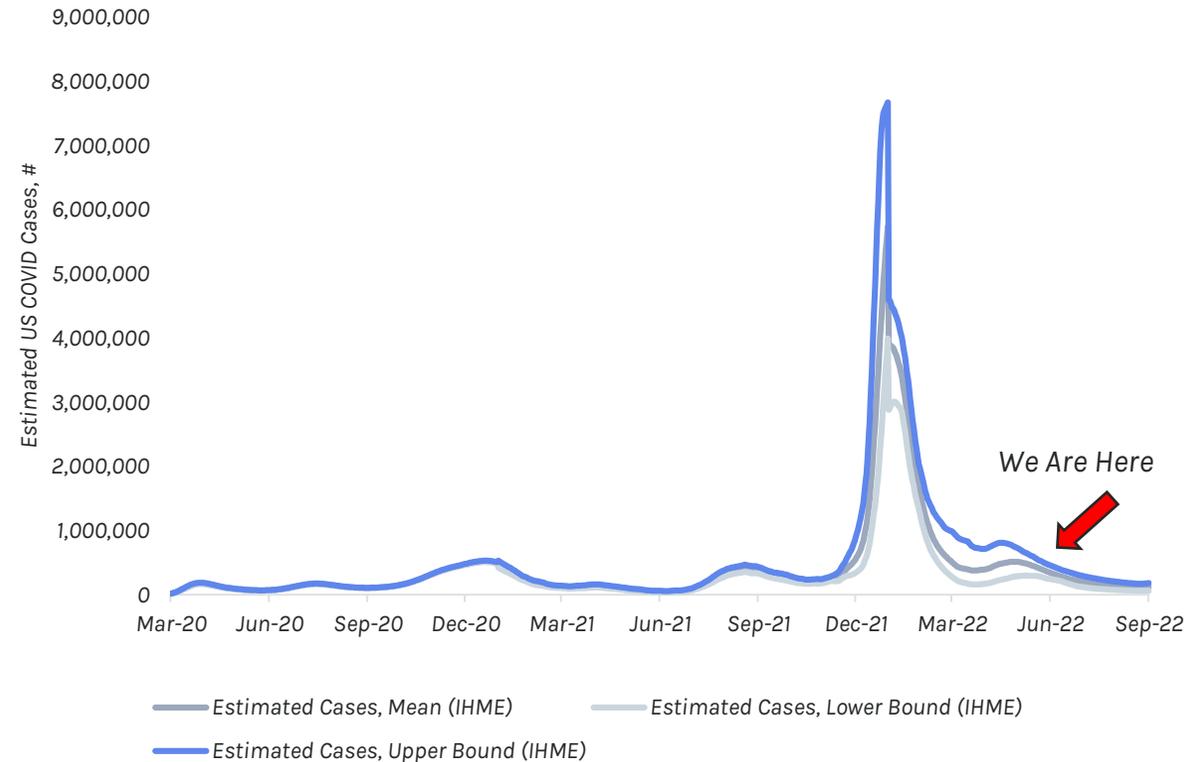
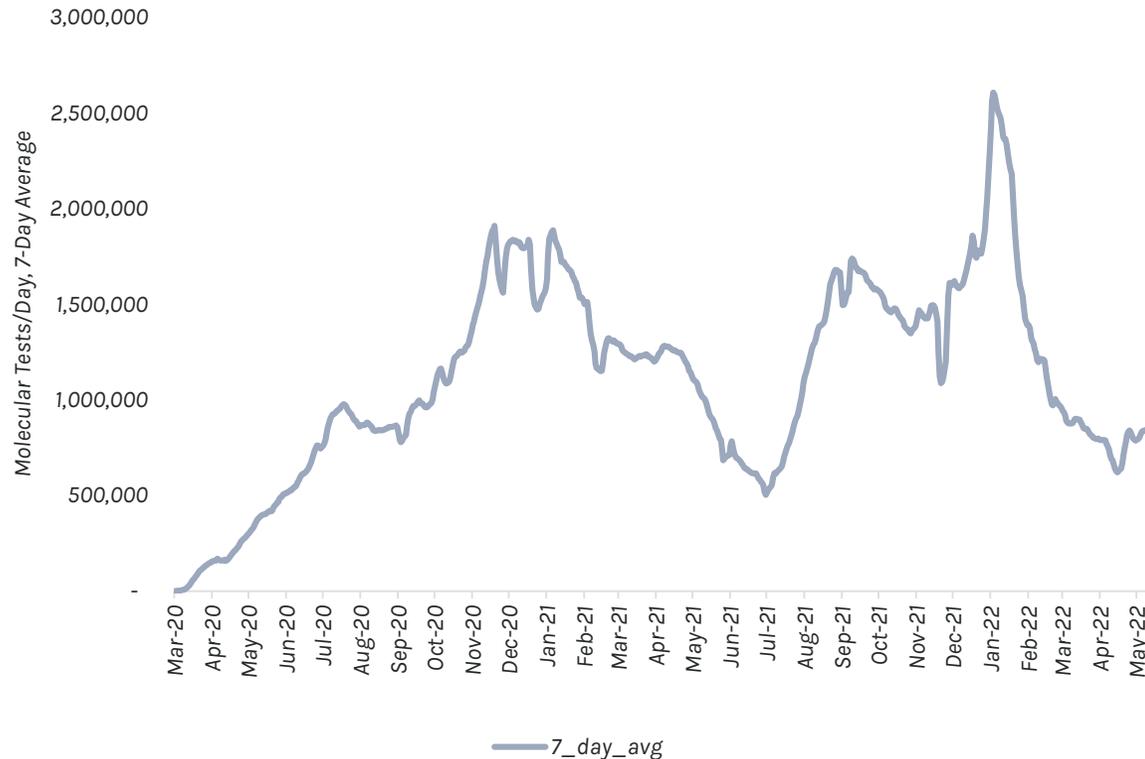
Google Trend | Search Term: "UroLift"

As an additional tracker, Google Trends act as a highly- correlated result for the device's quarterly revenue



Forecasting the Impact

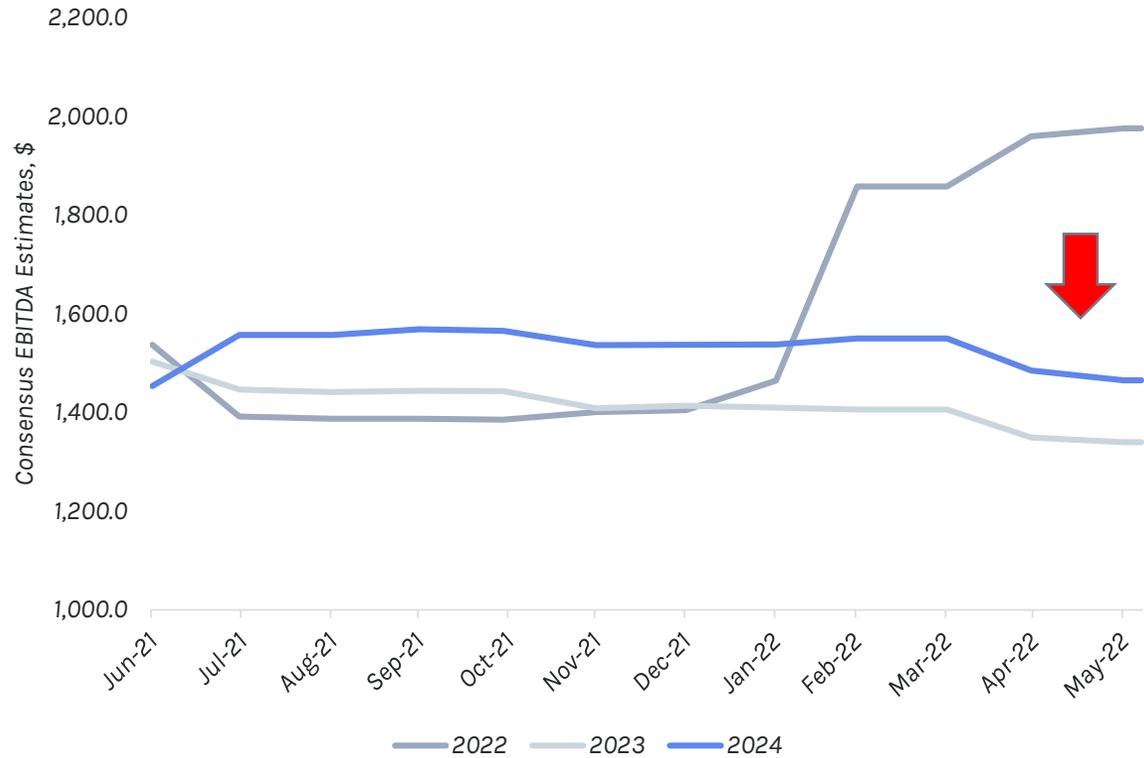
Based on the information we have, we expect HOLX COVID assay revenue to be \$150MM – \$220MM for FY23



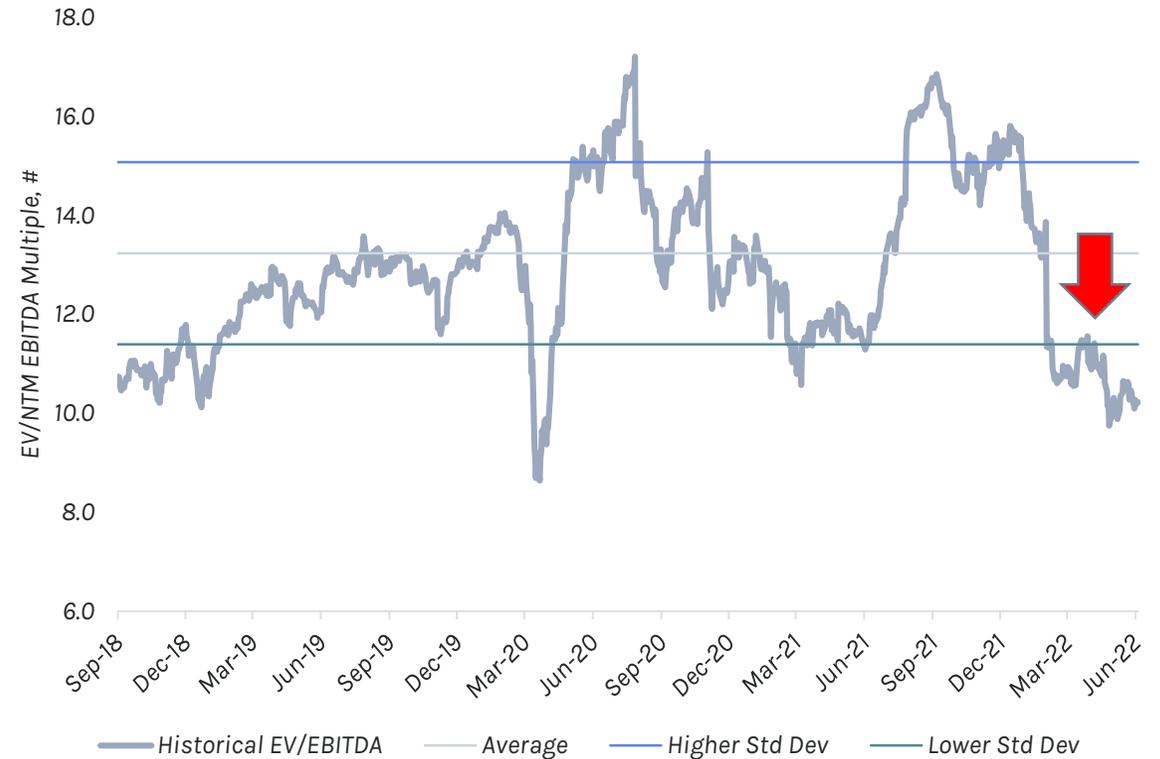
At the time of publishing, there are currently no standard CDC guidelines for ongoing COVID testing for schools or employers in FY23. EU countries have already discontinued emergency reimbursement for testing in order to signal the end of the pandemic, and the US is likely to follow. As a result, we expect that COVID will be treated like the flu going forward. At an average of 150k to 225k tests per day, HOLX COVID assay revenue opportunity for FY23 would be \$150MM-\$220MM given their current share.

Multiples Struggle Alongside Falling Estimates

Consensus EBITDA Estimates



EV/NTM EBITDA



Despite a significant uptick in both sales and EBITDA estimates for FY22 due to the lingering nature of COVID, HOLX's out year estimates have declined throughout 2Q22. Accordingly, all of the company's multiples have declined significantly to the bottom of their historical ranges since the beginning of the year. Recovery in base business is key from here.

Valuation

EV/Sales

		2022 Sales				
		\$4,216	\$4,438	\$4,672	\$4,905	\$5,151
2022 EV/Sales	3.5x	54.23	57.24	60.42	63.60	66.93
	4.0x	62.42	65.87	69.50	73.13	76.94
	4.5x	70.61	74.49	78.57	82.66	86.95
	5.0x	78.80	83.11	87.65	92.19	96.96
	5.5x	86.99	91.74	96.73	101.72	106.96
	6.0x	95.19	100.36	105.81	111.25	116.97

		2023 Sales				
		\$3,491	\$3,675	\$3,868	\$4,062	\$4,265
2023 EV/Sales	3.5x	44.36	46.86	49.49	52.12	54.89
	4.0x	51.15	54.00	57.01	60.01	63.17
	4.5x	57.93	61.14	64.52	67.91	71.46
	5.0x	64.71	68.28	72.04	75.80	79.74
	5.5x	71.50	75.42	79.56	83.69	88.03
	6.0x	78.28	82.56	87.07	91.58	96.32

EV/EBITDA

		2022 EBITDA				
		\$1,956	\$1,966	\$1,975	\$1,985	\$1,995
2022 EV/EBITDA	11.0x	80.48	80.90	81.32	81.74	82.17
	12.0x	88.08	88.54	89.00	89.46	89.92
	13.0x	95.68	96.17	96.67	97.17	97.67
	14.0x	103.28	103.81	104.35	104.89	105.43
	15.0x	110.88	111.45	112.03	112.60	113.18
	16.0x	118.48	119.09	119.70	120.32	120.93

		2023 EBITDA				
		\$1,326	\$1,333	\$1,340	\$1,347	\$1,353
2023 EV/EBITDA	11.0x	53.58	53.87	54.15	54.44	54.73
	12.0x	58.73	59.05	59.36	59.67	59.98
	13.0x	63.89	64.23	64.56	64.90	65.24
	14.0x	69.04	69.41	69.77	70.13	70.50
	15.0x	74.20	74.59	74.98	75.37	75.76
	16.0x	79.35	79.77	80.18	80.60	81.02

Despite the #Quad4 landscape, med tech looks to be “set up” in back half alongside the recovery of surgery volume and steady unleashing of pent- up demand. We will update our base business trackers when we receive the data internally later this week.

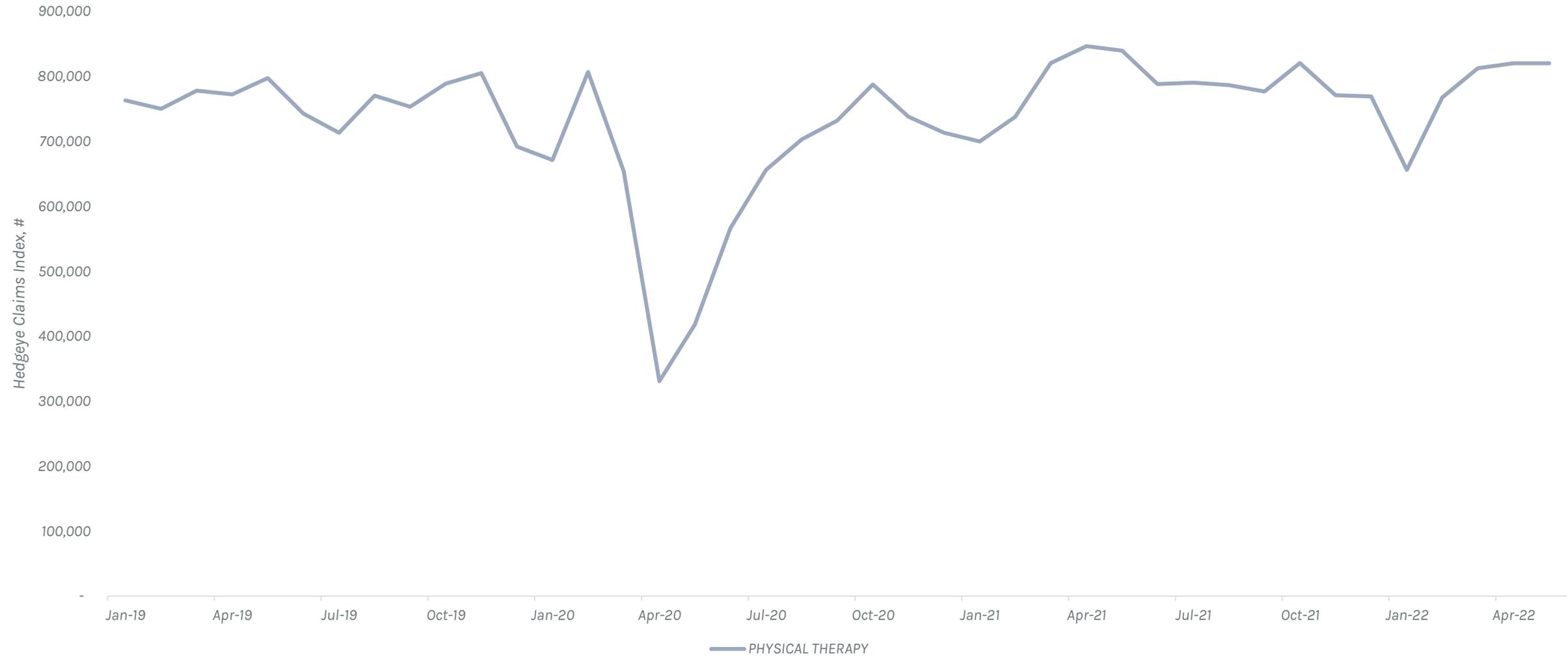
Claims: Mammography

Accelerating in May continuing to improve since Omicron lows in January



Claims: Physical Therapy

April and May averaging better than 1Q22 levels, although softer sequentially in May



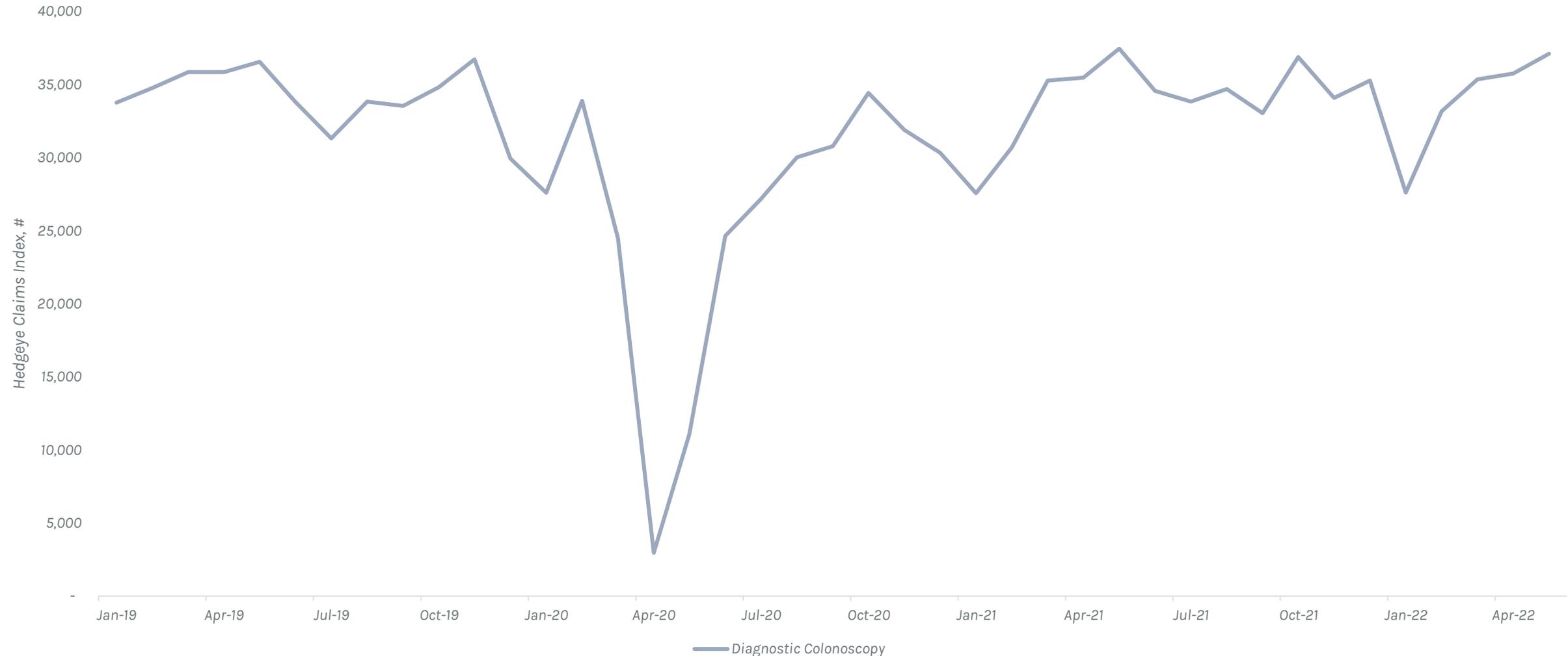
Claims: Screening Colonoscopy

Screening colonoscopy trends point to better in person care trends, pent up demand



Claims: Diagnostic Colonoscopy

Diagnostic colonoscopy trends point to better screening rates, higher acuity



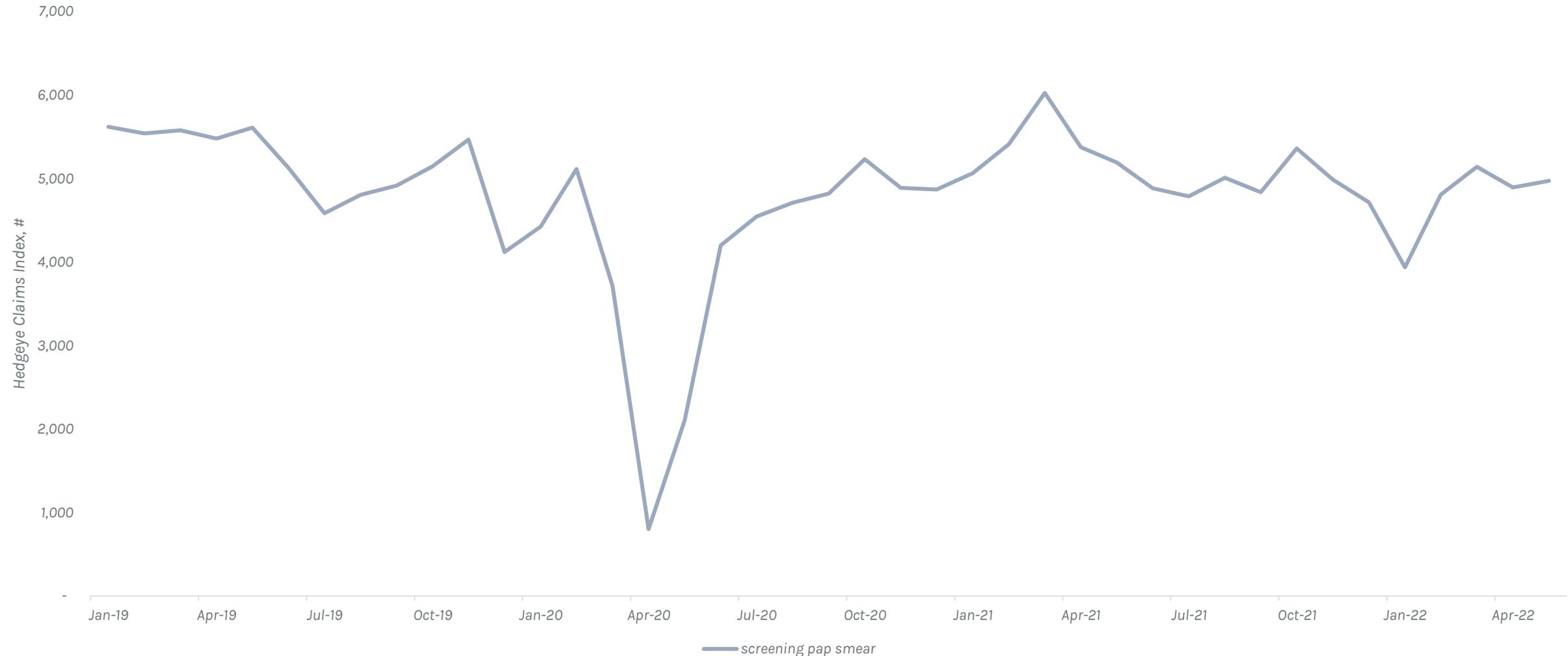
Claims: Colon Cancer Screening

Diagnostic mammography trends point to better screening rates



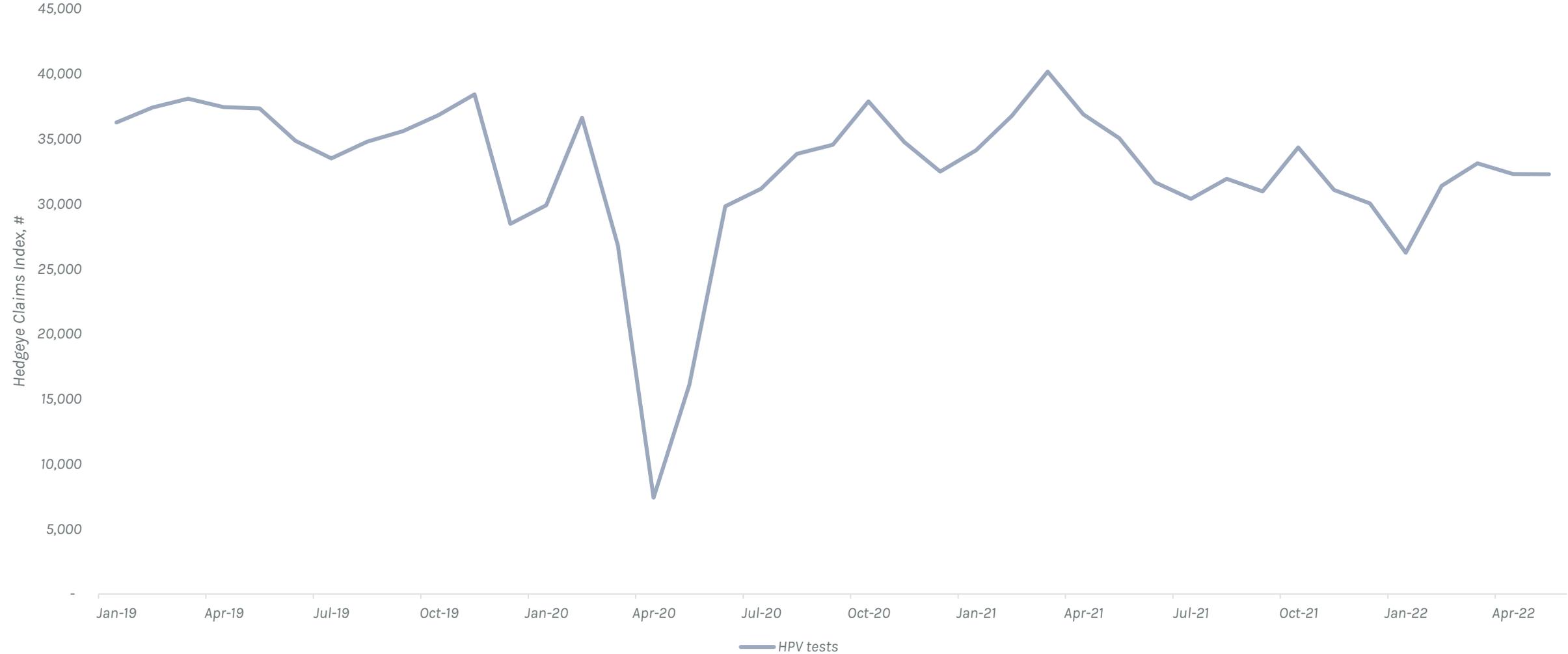
Claims: Screening Pap Smear

Routine women's health visits seeing a weaker rebound



Claims: HPV

Routine women's health visits seeing a weaker rebound



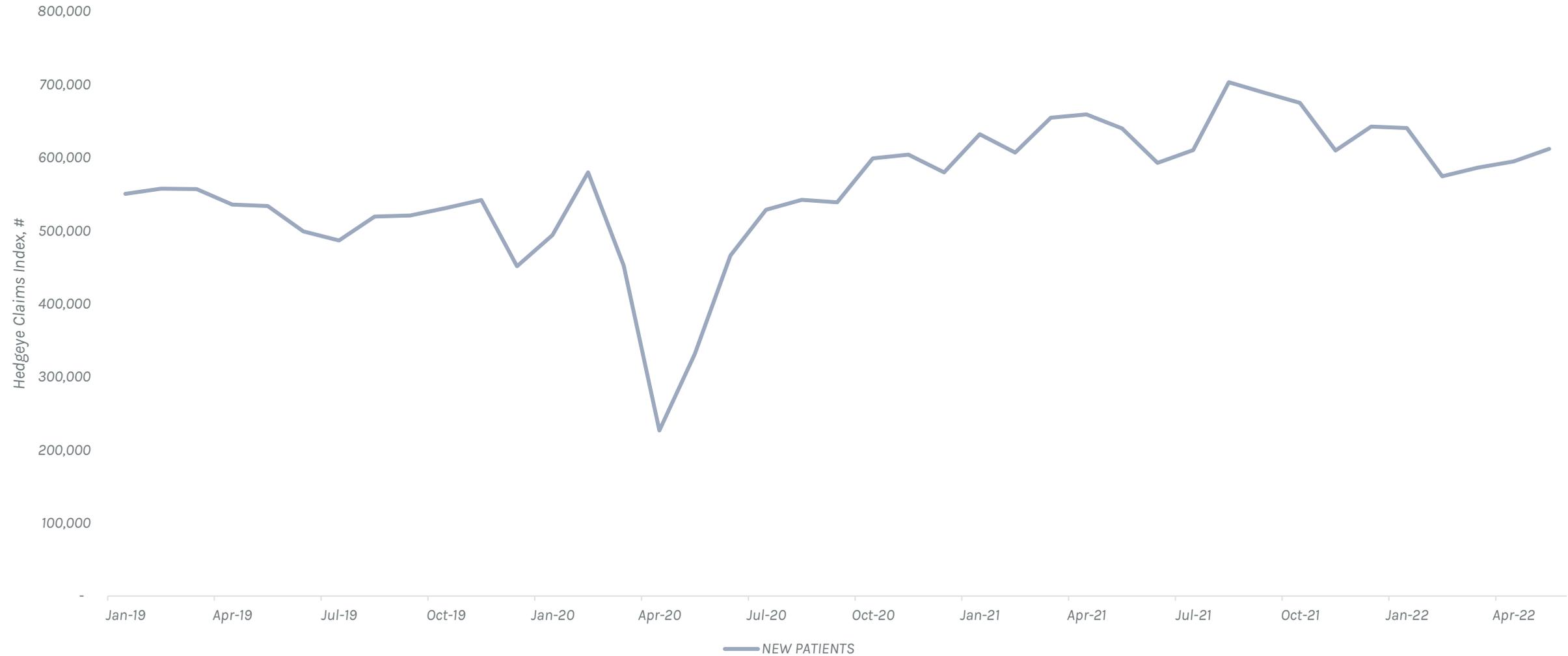
Claims: Existing Patients

Existing patients getting back to see a physician



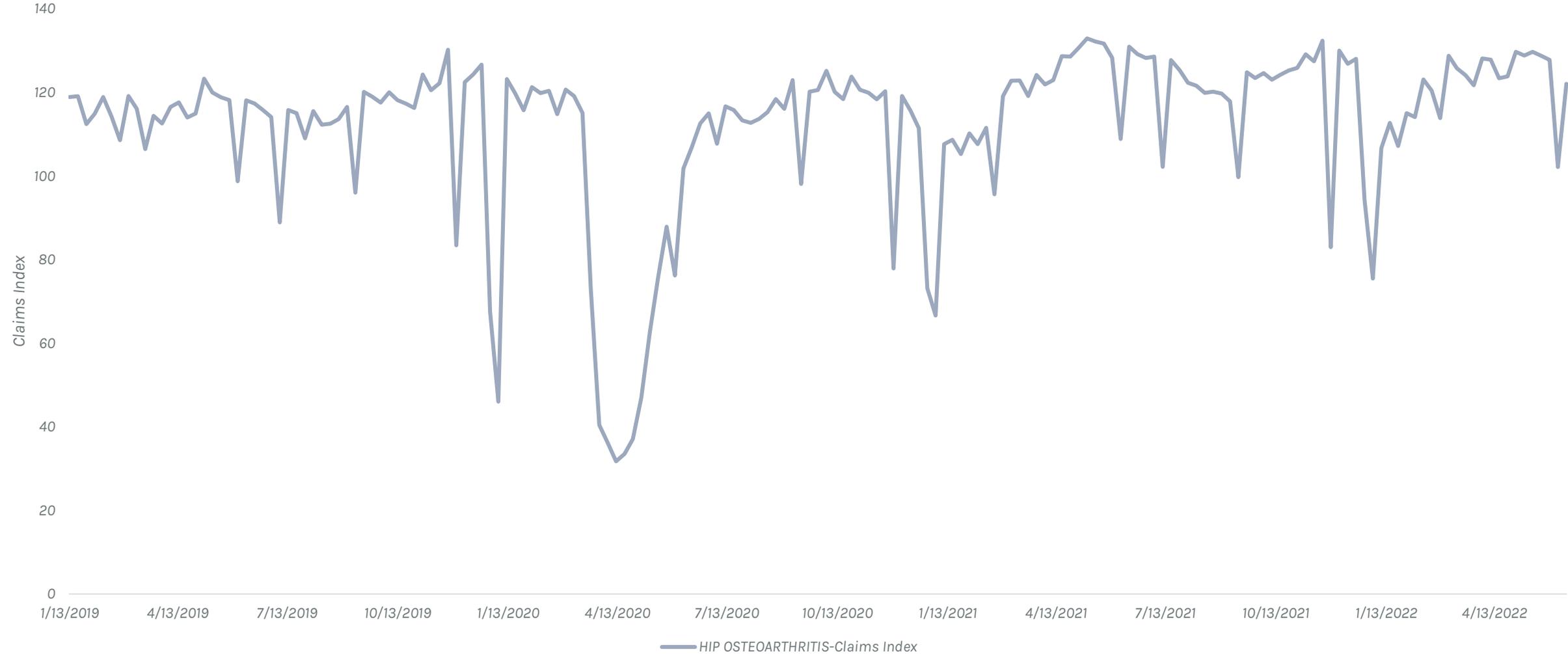
Claims: New Patients

New patients getting back to see a physician, Delta and Omicron crushed the recovery 2H21



Claims: Hip Osteoarthritis

A diagnosis of osteoarthritis precedes any surgical procedure such as total replacement



Claims: Knee Osteoarthritis

A diagnosis of osteoarthritis precedes any surgical procedure such as total replacement



ONEM | Provider Tracker Cont.

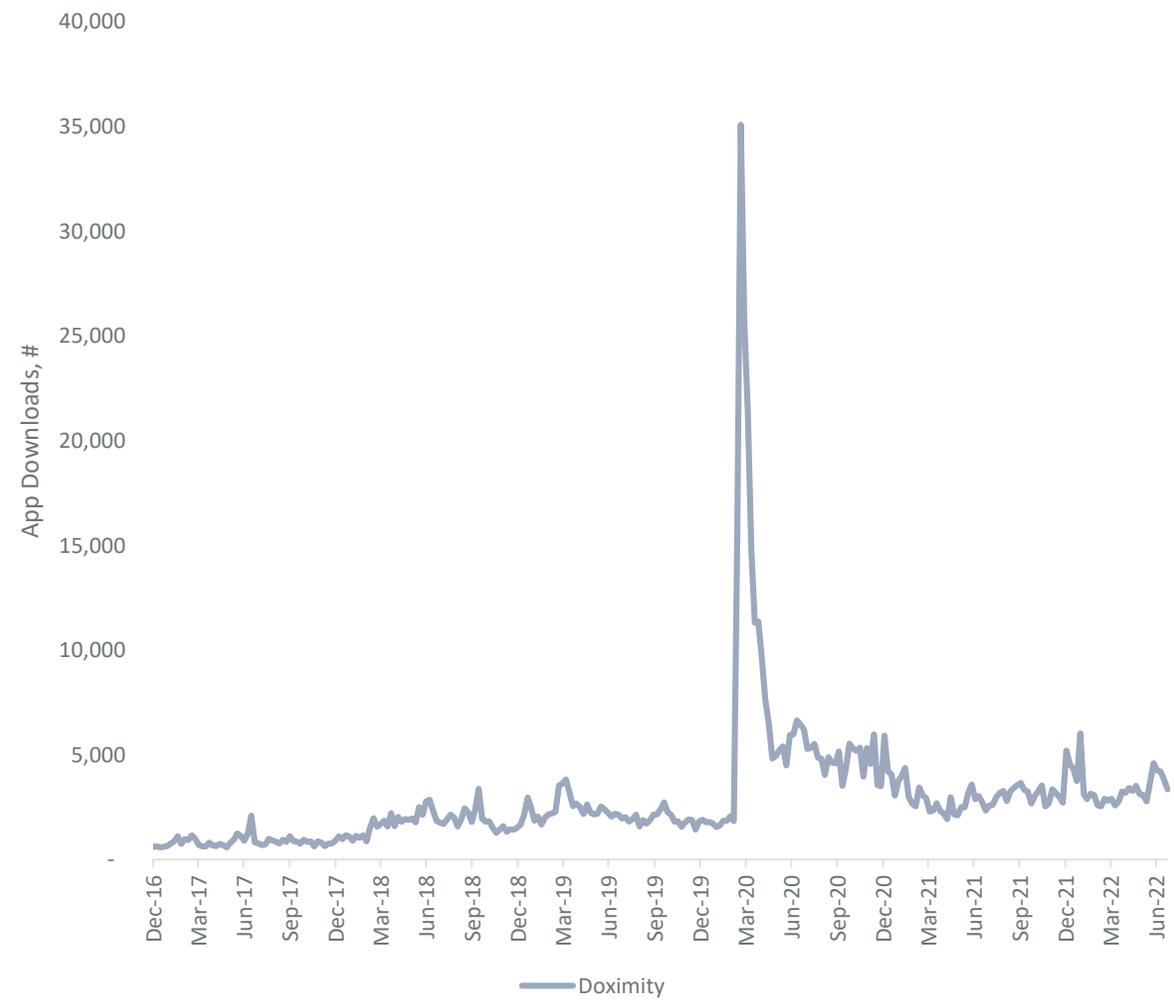
One Medical has added 15 new providers since our last update

	October 9/29/2020	November 10/28/2020	December 11/30/2020	January 1/8/2021	January 1/20/2021	Feb 2/8/2021	Apr 4/12/2021	May 5/17/2021	June 6/30/2021	August 8/23/2021	September 9/29/2021	December 12/8/2021	January 1/5/2022	February 2/3/2022	March 3/3/2022	April 3/30/2022	May 5/5/2022	Jun 6/7/2022	July 7/7/2022
Active	635	646	630	635	646	662	650	663	670	684	692	691	718	730	742	749	760	770	759
Active - New	18	21	10	14	18	6	26	18	29	18	25	35	18	16	12	24	18	2	15
Inactive	7	37	5	3	2	18	13	11	15	10	26	8	6	4	5	13	8	13	0
Total - End	646	630	635	646	662	650	663	670	684	692	691	718	730	742	749	760	770	759	774
Check	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
Family Medicine	155	161	164	165	167	166	166	163	167	171	175	182	184	186	186	186	188	187	188
Internal Medicine	78	79	76	76	78	78	80	79	83	84	84	82	82	83	83	82	81	81	81
General Practice	1	1	2	2	2	3	3	3	3	3	3	3	3	3	3	2	2	2	1
Pediatrics	14	14	14	14	14	14	13	12	12	12	12	13	13	13	13	13	13	13	11
Obstetrics & Pediatrics	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sports Medicine	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Osteopathic Medicine	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Obstetrics/Gynecology	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1
Pediatric Medicine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Legal Medicine	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
Total	254	261	262	263	267	267	268	263	271	275	279	284	286	289	289	287	288	287	285
SPECIALITY/ Taxonomy	9/29/2020	10/28/2020	11/30/2020	1/8/2021	1/20/2021	2/8/2021	4/12/2021	5/17/2021	6/30/2021	8/23/2021	9/29/2021	12/8/2021	1/5/2022	2/3/2022	3/3/2022	3/30/2022	5/5/2022	6/7/2022	7/7/2022
Family Medicine	155	161	164	165	167	166	166	163	167	171	175	182	184	186	186	186	188	187	188
Internal Medicine	78	79	76	76	78	78	80	79	83	84	84	82	82	83	83	82	81	81	81
Physician Assistant	135	136	129	131	136	140	140	144	147	147	148	150	149	152	156	163	166	163	163
Registered Nurse	8	10	10	12	14	14	18	19	19	21	21	21	20	23	23	27	29	29	30
Nurse Practitioner	137	144	136	140	141	141	141	144	148	144	146	145	143	144	145	147	145	145	141
Others	133	100	120	122	126	111	118	121	120	125	117	138	152	154	156	155	161	154	171
Total	646	630	635	646	662	650	663	670	684	692	691	718	730	742	749	760	770	759	774

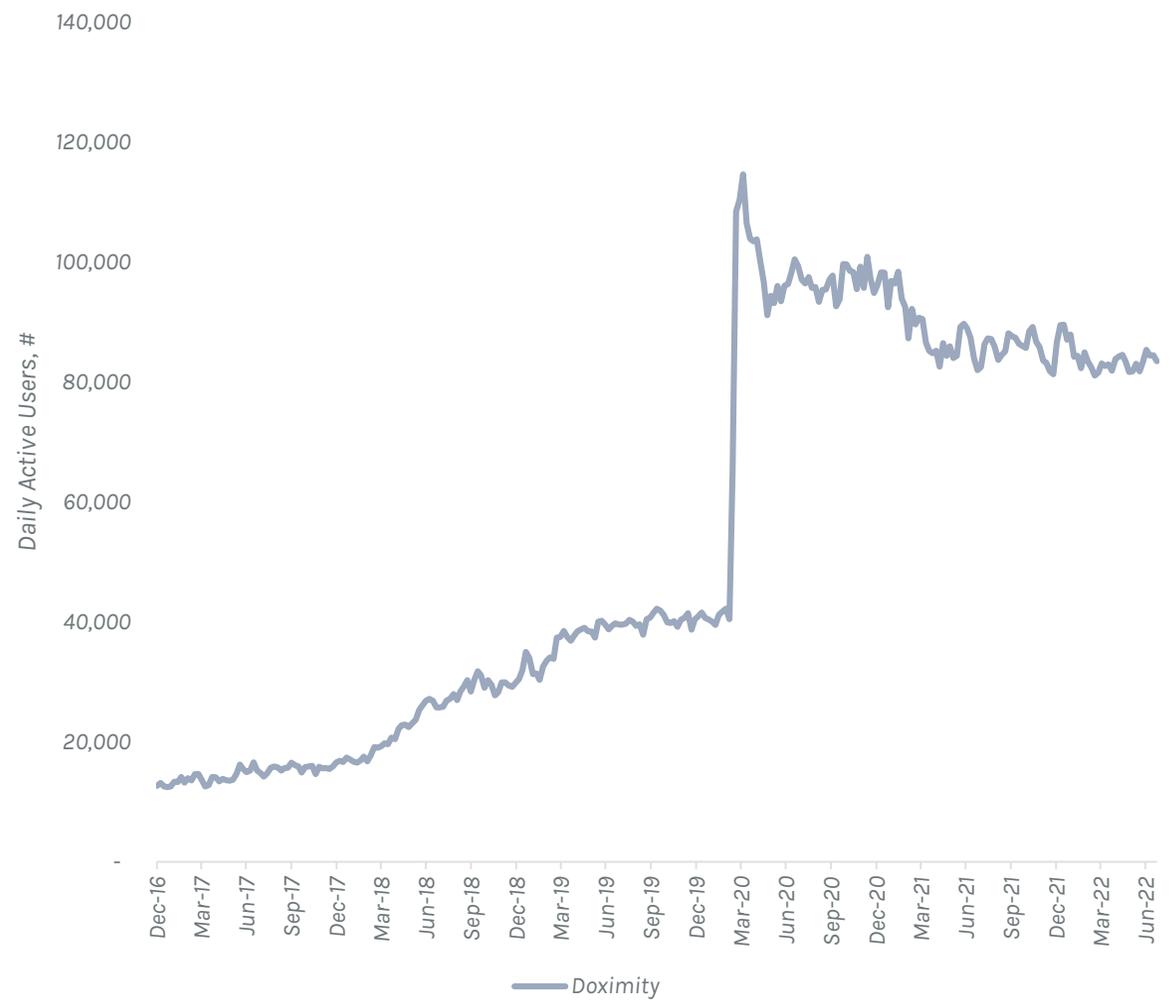
As of July 07, 2022, we've identified 774 providers across ONEM's offices

DOCS | App Update Post- 2Q22 Earnings Result

App Downloads, Weekly

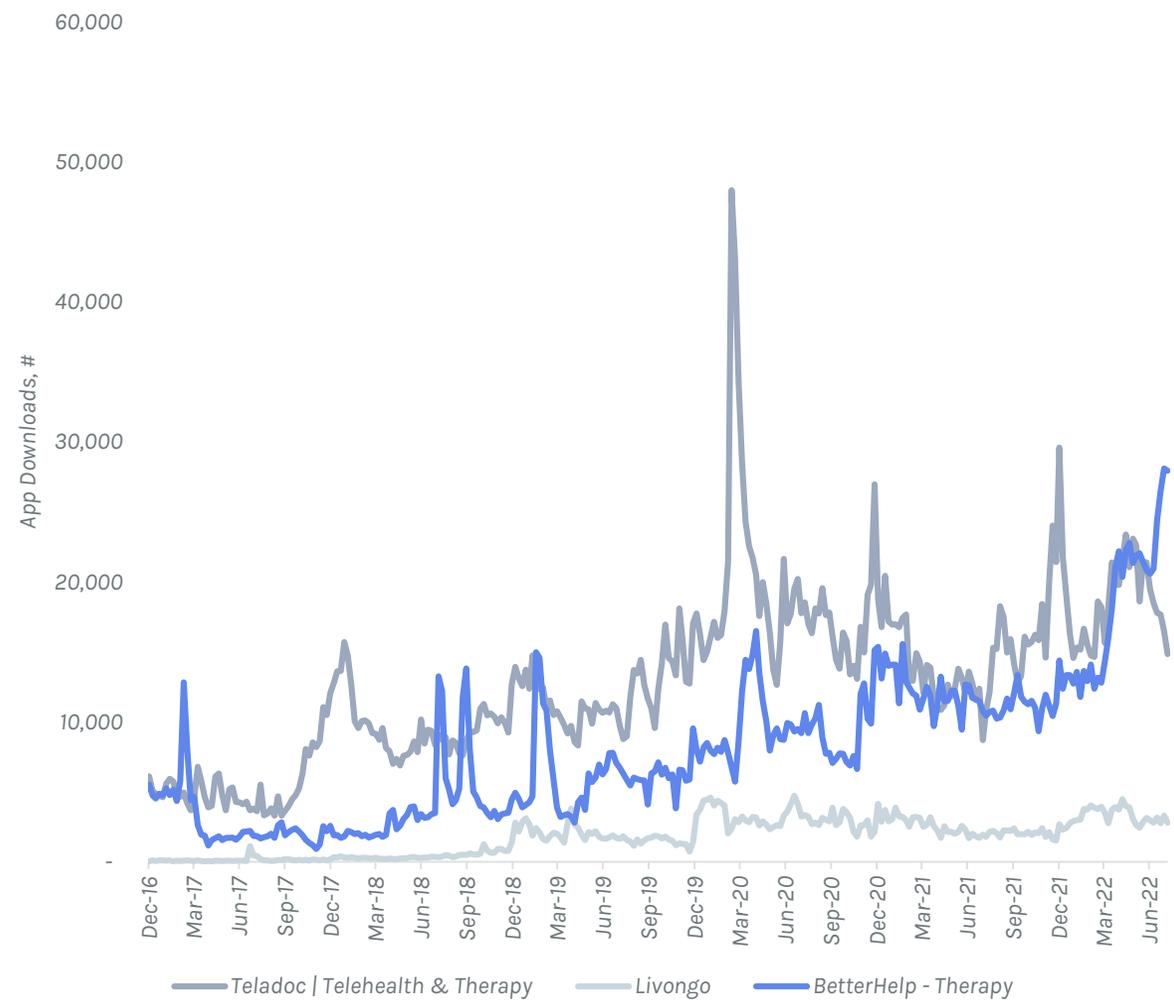


Active Users, Weekly

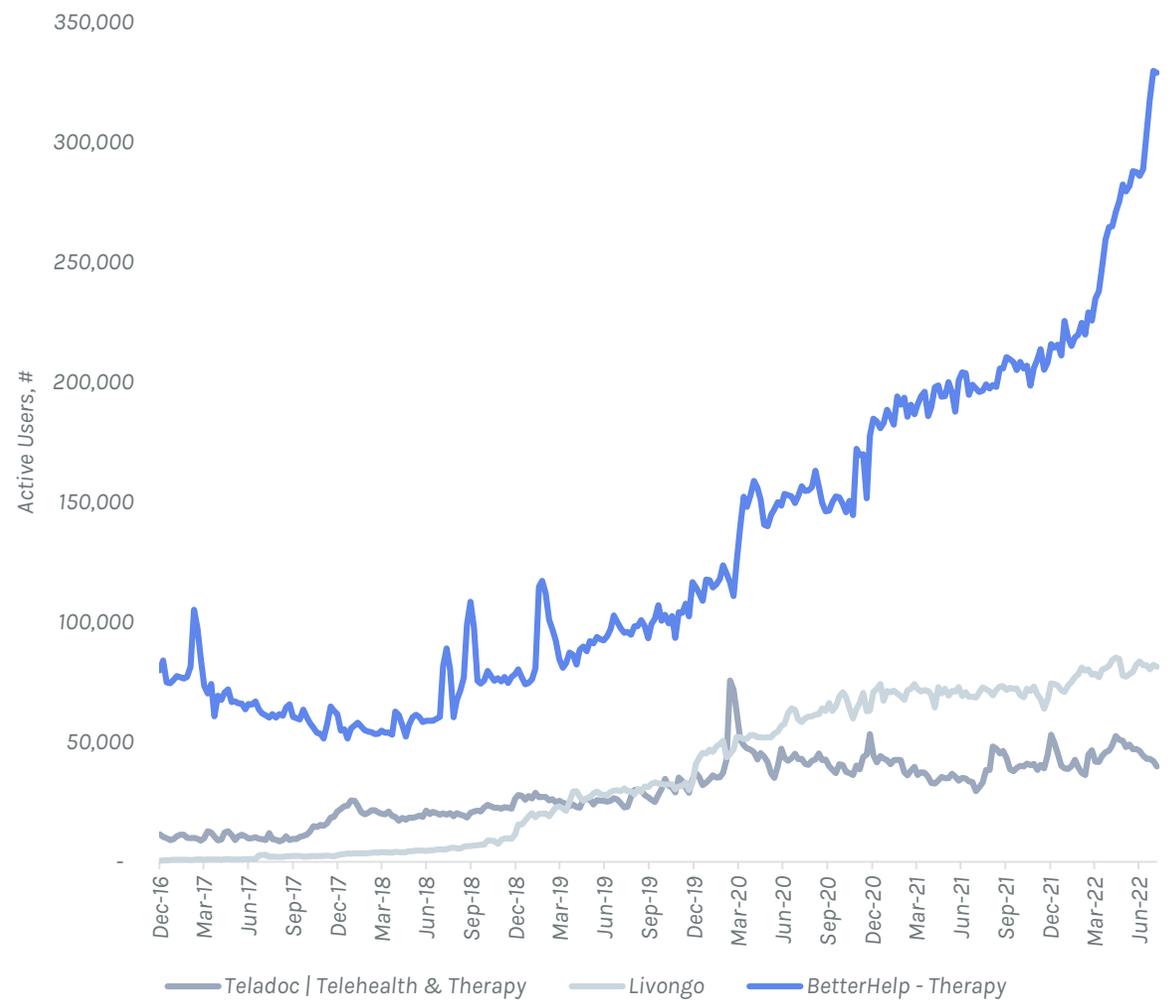


TDOC | App Update Post- Street Downgrade

App Downloads, Weekly



Active Users, Weekly

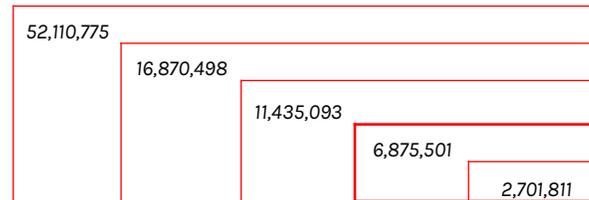


Livongo Assessment on Potential TAM

Clients most likely to adopt are large employers with employees making above median income

Income Decile Range		Average Payroll Per Employee (000)		Total	<500	500-749	750-999	1,000-1,499	1,500-1,999	2,000-2,499	2,500-4,999	5,000-9,999	10,000-19,999	20,000+
0%	10%	\$14	\$29	29,805,233	8,553,875	430,128	309,254	389,774	278,245	160,347	1,162,078	1,123,045	1,398,399	10,134,258
10%	20%	\$29	\$35	5,534,978	11,870,136	824,973	637,244	906,866	758,110	249,103	6,375	70,586	0	0
20%	30%	\$35	\$43	18,118,571	14,303,744	801,130	544,643	83,506	0	368,122	1,065,723	1,124,346	1,059,849	156,238
30%	40%	\$43	\$51	25,107,720	68,732,787	233,584	231,274	921,112	585,410	496,034	110,643	118,649	0	3,721,695
40%	50%	\$51	\$58	142,461,603	5,373,702	4,741,029	3,261,028	4,401,597	3,025,896	0	1,692,790	367,707	319,333	31,303,557
50%	60%	\$58	\$67	6,533,061	3,413,157	72,643	38,677	60,408	421,559	2,510,729	8,050,184	9,527,237	10,126,278	4,476,436
60%	70%	\$67	\$84	6,115,476	6,954,768	367,108	252,629	316,906	182,971	78,084	142,960	723	1,476,222	2,002,945
70%	80%	\$84	\$96	9,483,647	1,909,993	431,005	125,035	142,457	18,611	89,453	423,206	941,629	28,692	2,399,009
80%	90%	\$96	\$105	10,560,837	0	296,846	170,287	409,017	333,665	159,479	832,753	331,971	433,183	2,140,113
90%	100%	\$105	\$157	3,462,498	0	20,302	211,459	195,757	256,997	222,397	556,596	858,291	1,600,394	2,701,811

The total number of employees at target firms ranges from 2.7M to 52M, although our best estimate peaks at 6.8M.



Primary Research

Based on a conversation with a well-connected telehealth consultant in our network, we can assume a minimum of 500 enrollees for any Livongo customer. Lower than 500 employees, the ability to generate a meaningful ROI is too difficult.

A number of sources suggest 25% of the population has chronic disease, but only ~12% is both chronic and high cost. Further, only 30% of these chronic and high-cost enrollees will be engaged with a digital intervention, which in aggregate yields only 3.6% of total enrollment. We need to assume an employer with at least 13,000 employees to yield 500 Livongo enrollees.

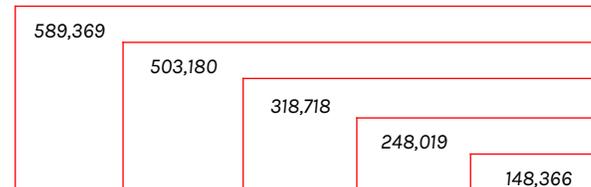
At the national level, the total number of employees is likely 6.8M who work at firms who might consider Livongo.

Livongo Assessment on Potential TAM

The number of employers peaks at 248K

Income Decile Range		Average Payroll Per Employee		Total	<500	500-749	750-999	1,000-1,499	1,500-1,999	2,000-2,499	2,500-4,999	5,000-9,999	10,000-19,999	20,000+
0%	10%	\$14	\$29	1,798,378	602,215	11,115	8,082	9,698	6,792	4,100	41,324	45,360	60,933	245,058
10%	20%	\$29	\$35	764,840	1,551,368	15,119	10,024	13,322	13,650	6,531	72	872	0	0
20%	30%	\$35	\$43	691,776	1,255,749	15,935	10,143	2,307	0	6,415	5,693	7,860	10,818	13,524
30%	40%	\$43	\$51	1,134,943	790,709	5,203	4,991	13,532	7,849	6,691	3,836	6,120	0	32,037
40%	50%	\$51	\$58	697,504	706,105	4,617	2,833	3,285	2,249	0	21,415	11,357	16,160	18,662
50%	60%	\$58	\$67	715,641	335,938	5,794	2,588	3,893	6,356	3,911	13,201	15,318	18,438	83,306
60%	70%	\$67	\$84	409,656	978,968	6,424	5,074	5,651	4,451	589	1,159	43	15,858	6,833
70%	80%	\$84	\$96	940,450	291,750	7,248	1,704	1,819	433	2,681	12,935	19,245	341	56,480
80%	90%	\$96	\$105	651,123	0	9,772	2,406	6,054	4,691	3,455	32,183	8,287	8,547	86,107
90%	100%	\$105	\$157	56,363	0	457	7,955	8,821	7,768	7,959	7,922	20,433	34,285	62,259

The total number of establishments at target firms ranges from 148K to 589K, although our best estimate peaks at 248K firms.



Primary Research

Based on a conversation with a well-connected telehealth consultant in our network, we can assume a minimum of 500 enrollees for any Livongo customer. Lower than 500 employees, the ability to generate a meaningful ROI is too difficult.

A number of sources suggest 25% of the population has chronic disease, but only ~12% is both chronic and high cost. Further, only 30% of these chronic and high-cost enrollees will be engaged with a digital intervention, which in aggregate yields only 3.6% of total enrollment. We need to assume an employer with at least 13,000 employees to yield 500 Livongo enrollees.

Livongo Assessment on Potential TAM

The employer market appears limited from here even at the high end of reasonable assumptions

Population x 12% high cost chronic x 30% engaged						
Income Decile Range		Average Payroll Per Employee (000)		2,000-2,499	2,500-4,999	5,000-9,999
50%	60%	\$58	\$67	987,755		
60%	70%	\$67	\$84		607,338	
70%	80%	\$84	\$96			411,663
80%	90%	\$96	\$105			247,518
90%	100%	\$105	\$157			97,265

Population x 25% chronic x 30% engaged						
Income Decile Range		Average Payroll Per Employee (000)		2,000-2,499	2,500-4,999	5,000-9,999
50%	60%	\$58	\$67	2,057,823		
60%	70%	\$67	\$84		1,265,287	
70%	80%	\$84	\$96			857,632
80%	90%	\$96	\$105			515,663
90%	100%	\$105	\$157			202,636

Population x 25% chronic x 30% engaged x 2.1 dependents						
Income Decile Range		Average Payroll Per Employee (000)		2,000-2,499	2,500-4,999	5,000-9,999
50%	60%	\$58	\$67	4,321,429		
60%	70%	\$67	\$84		2,657,103	
70%	80%	\$84	\$96			1,801,027
80%	90%	\$96	\$105			1,082,891
90%	100%	\$105	\$157			425,535

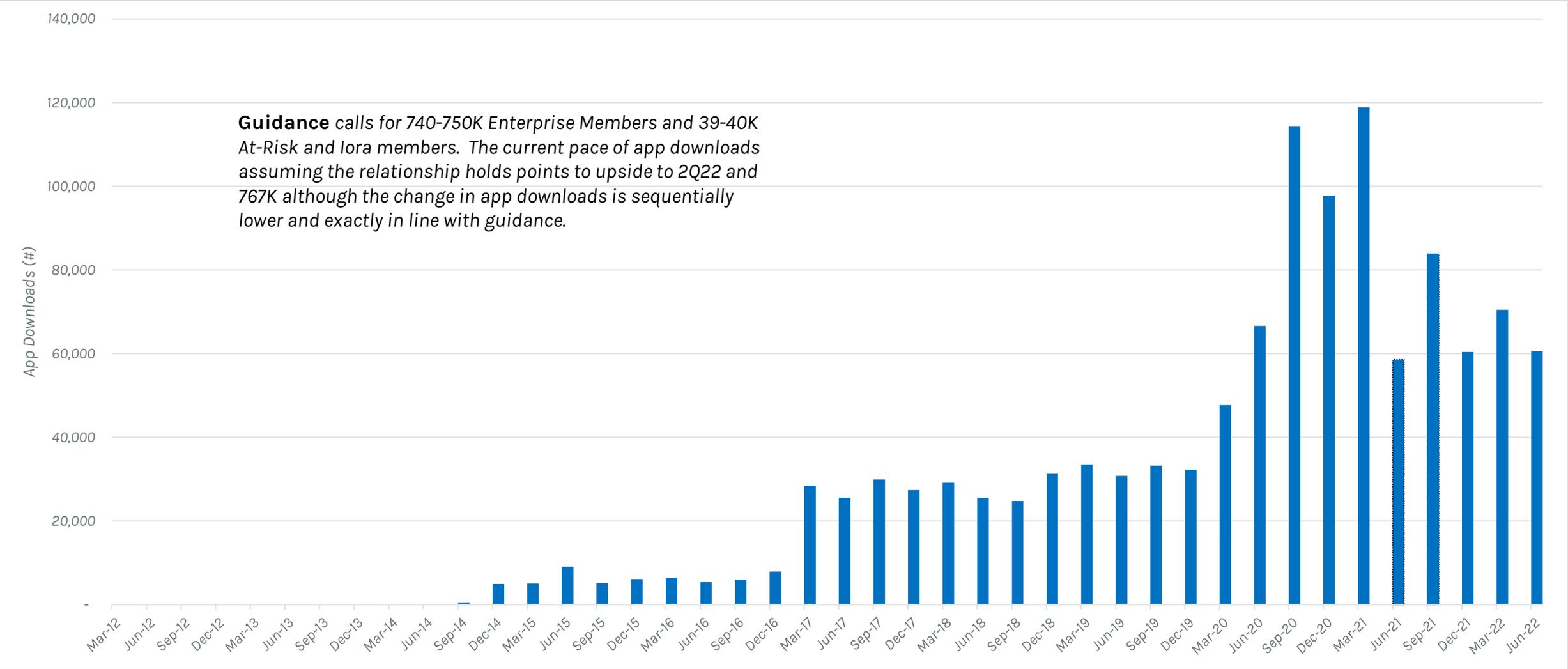
Here we have made a series of escalating assumptions for the presence of chronic disease, the number of high-cost employees in the chronic category, engagement, and dependents.

Even at the most generous end of our assumptions our maximum enrollment is only slightly ahead of Teladoc's most recent chronic disease enrollment.

ONEM | App Downloads

Quarterly App Downloads sequentially lower in 2Q22

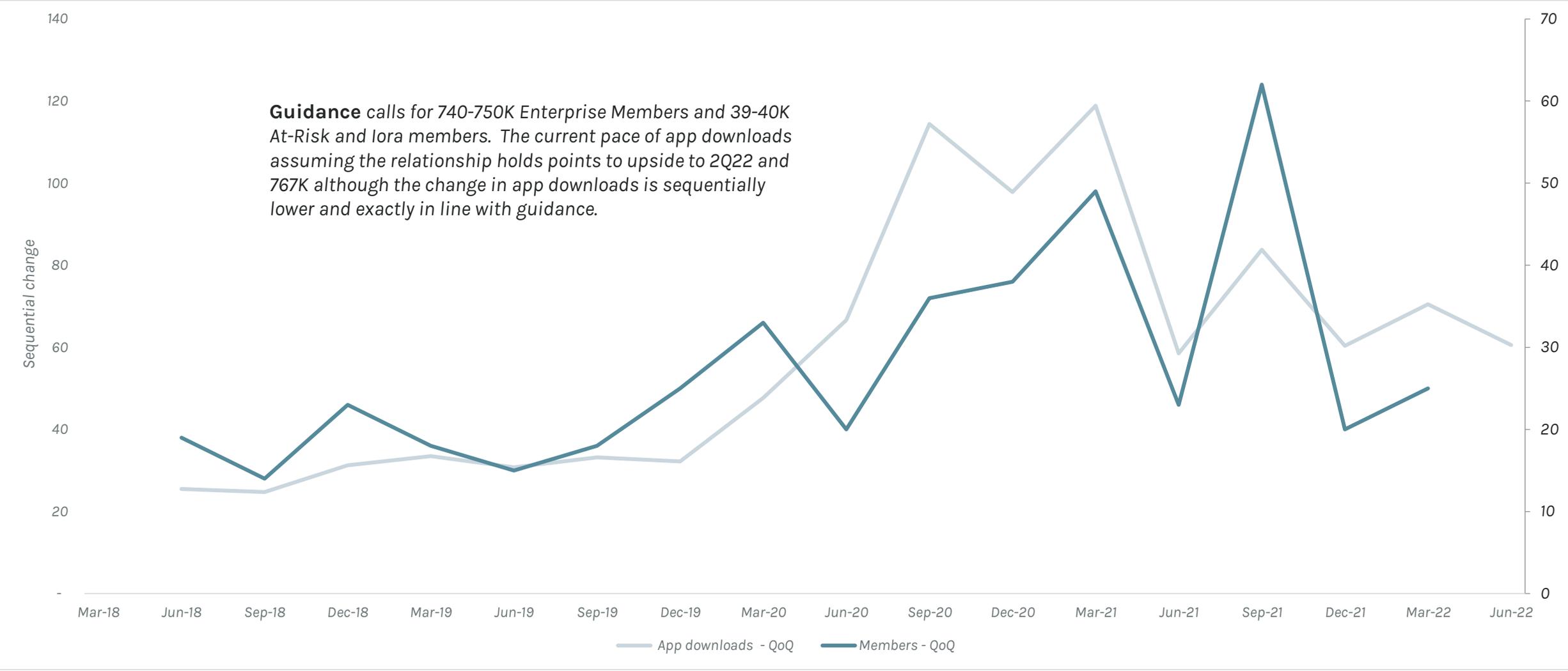
Guidance calls for 740-750K Enterprise Members and 39-40K At-Risk and Iora members. The current pace of app downloads assuming the relationship holds points to upside to 2Q22 and 767K although the change in app downloads is sequentially lower and exactly in line with guidance.



ONEM | App Downloads vs. Member Growth

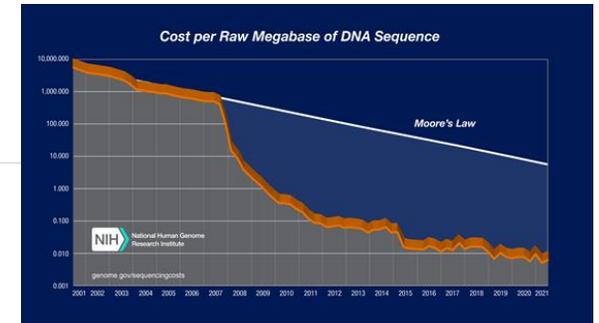
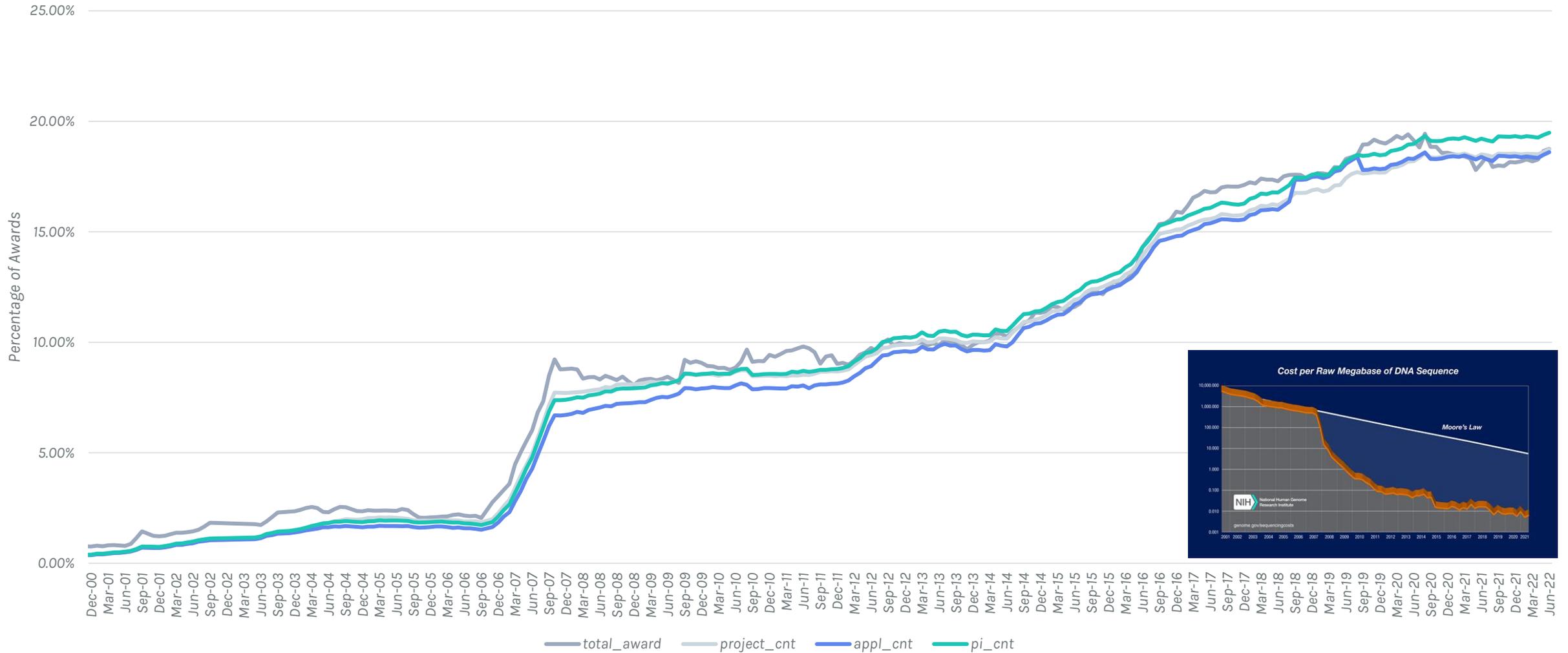
Sequential change in app downloads is inline with 2Q22 membership guidance

Guidance calls for 740-750K Enterprise Members and 39-40K At-Risk and Iora members. The current pace of app downloads assuming the relationship holds points to upside to 2Q22 and 767K although the change in app downloads is sequentially lower and exactly in line with guidance.



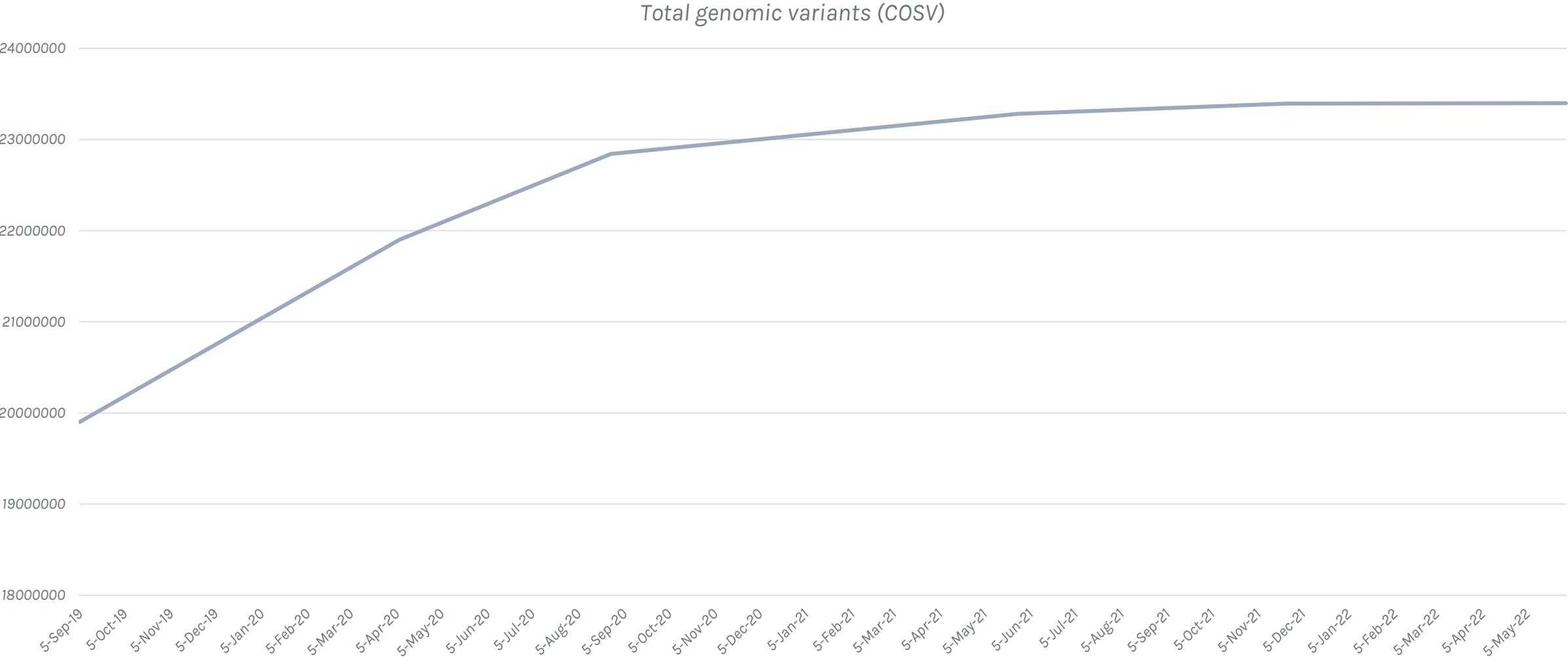
ILMN | NIH Awards

Award funding penetration stalled at 18%-20% and lines up with cost per megabase



ILMN | Total Genomic Variants

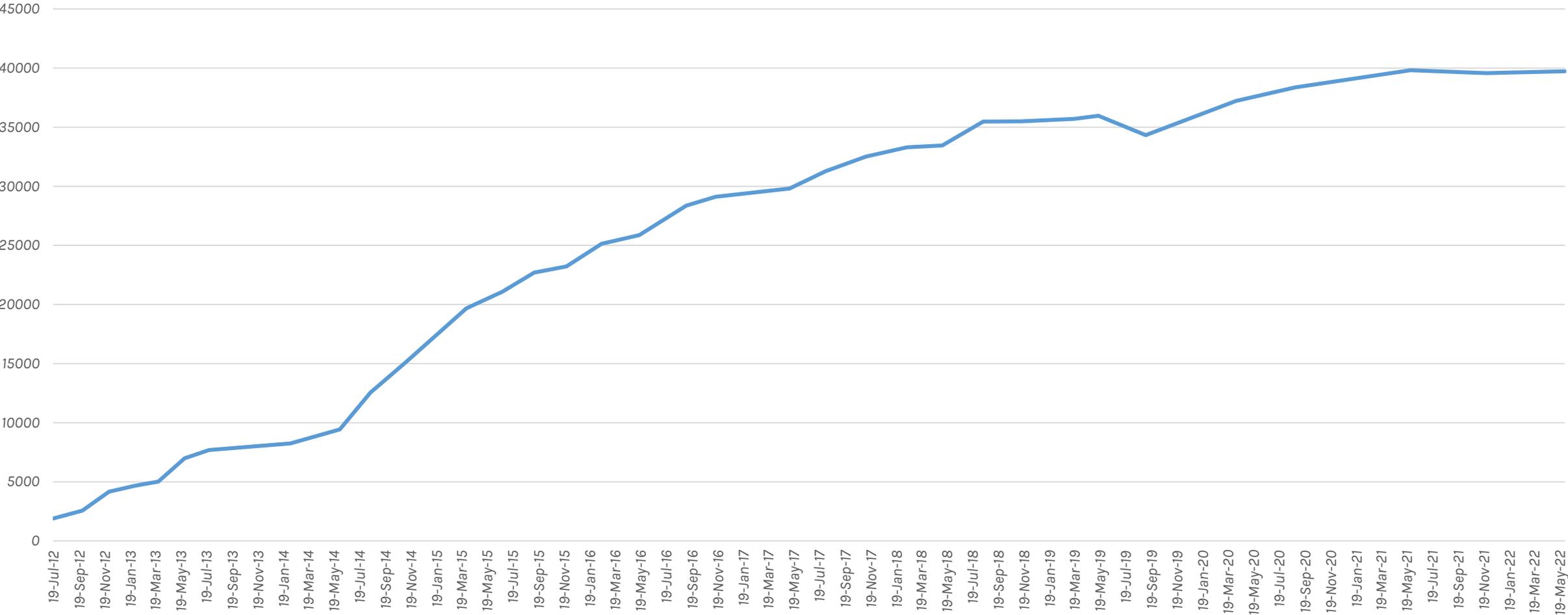
Catalog of Somatic Mutations In Cancer, Wellcome Sanger Institute



ILMN | Whole Genome Samples

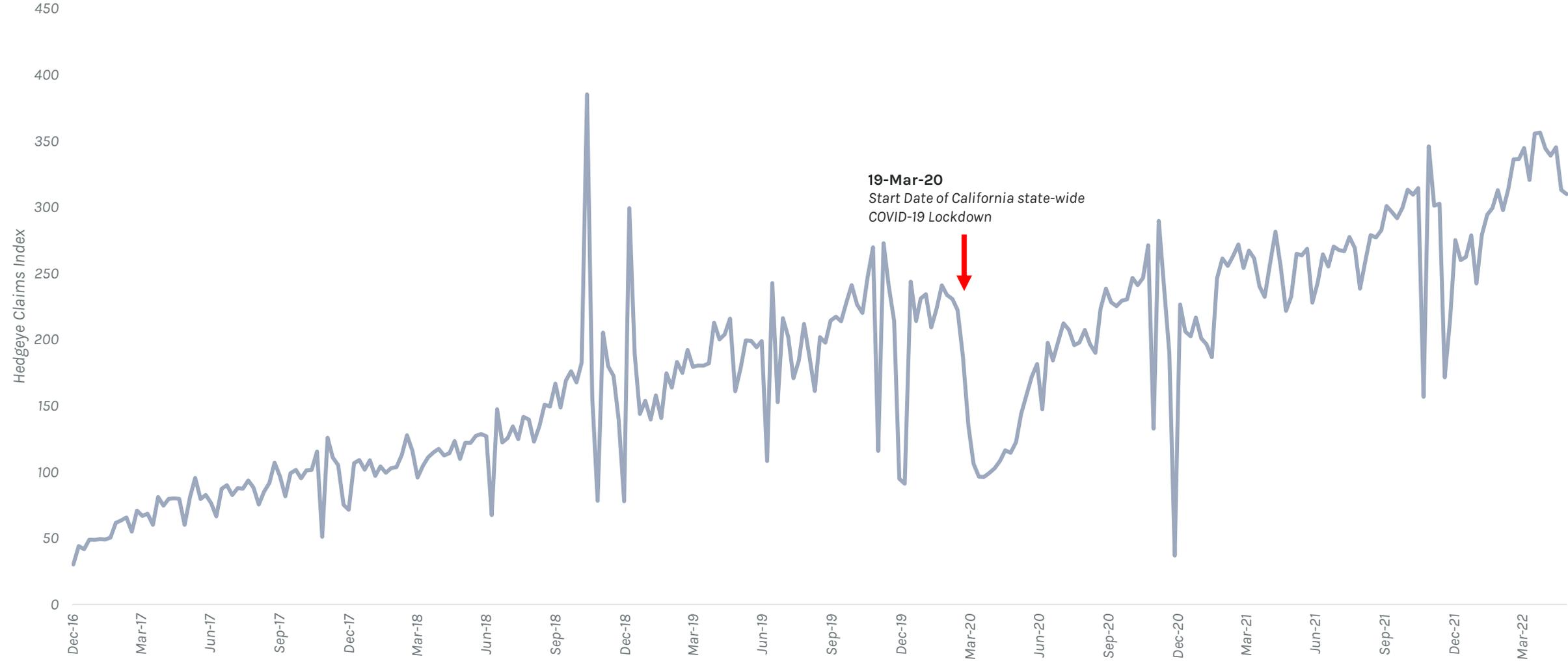
Catalog of Somatic Mutations In Cancer, Wellcome Sanger Institute

Whole genome screen samples



Exact Sciences (EXAS)

Claims Index, Weekly - Z12 (Cologuard)



EXAS | Claims Forecast

Claims Index Forecasting Method

Week	Q1-2017	Q2-2017	Q3-2017	Q4-2017	FY2017	Q1-2018	Q2-2018	Q3-2018	Q4-2018	FY2018	Q1-2019	Q2-2019	Q3-2019	Q4-2019	FY2019	Q1-2020	Q2-2020	Q3-2020	Q4-2020	FY2020	Q1-2021	Q2-2021	Q3-2021	Q4-2021	FY2021	Q1-2022	Q1-2022
1	49	71	68	95	283	108	107	68	149	431	300	182	107	221	810	94	107	146	227	575	230	269	238	296	1,034	270	330
2	45	63	93	104	304	114	113	148	168	543	190	179	249	217	835	250	97	197	226	770	209	261	259	292	1,021	253	308
3	51	83	95	111	341	105	118	121	176	520	143	181	188	230	742	219	97	184	233	733	206	239	251	288	984	255	341
4	54	79	88	105	327	112	120	126	169	527	161	214	252	241	869	238	99	197	230	764	219	233	265	294	1,011	271	341
5	53	83	90	110	336	100	116	138	179	532	142	202	223	229	796	237	102	209	245	794	205	256	263	309	1,033	236	330
6	52	88	92	109	340	108	117	128	370	723	170	203	192	222	787	213	108	205	241	767	197	280	261	304	1,043	270	324
7	53	82	97	136	368	104	126	144	156	530	142	212	196	250	800	227	116	194	246	782	189	254	270	309	1,022	285	331
8	62	61	93	55	271	107	112	142	79	439	173	160	221	272	825	245	113	195	275	828	250	220	262	153	886	290	300
9	66	84	78	132	359	108	123	123	203	558	164	179	194	117	655	236	121	205	133	695	265	231	234	340	1,070	303	297
10	68	101	95	115	379	118	121	134	179	552	181	199	164	275	819	233	143	194	289	858	260	264	254	295	1,073	288	-
11	57	85	103	110	355	133	128	152	170	584	174	194	206	242	816	224	157	187	239	808	267	261	273	295	1,097	303	-
12	75	89	120	77	362	122	131	155	138	545	193	192	201	215	802	188	171	221	201	781	276	265	271	167	979	323	-
13	68	81	102	73	323	99	127	166	77	469	179	197	217	96	689	137	181	236	106	659	257	226	278	209	969	324	-
Total	754	1,050	1,213	1,332	4,349	1,439	1,558	1,745	2,211	6,953	2,310	2,496	2,611	2,828	10,245	2,739	1,612	2,572	2,889	9,812	3,031	3,259	3,380	3,551	13,220	3,669	2,904

Correlation	
Claims Data & Reported Claims	98.9%

Reported		Q1-2022
Implied by Consensus		
Cologuard Revenue		

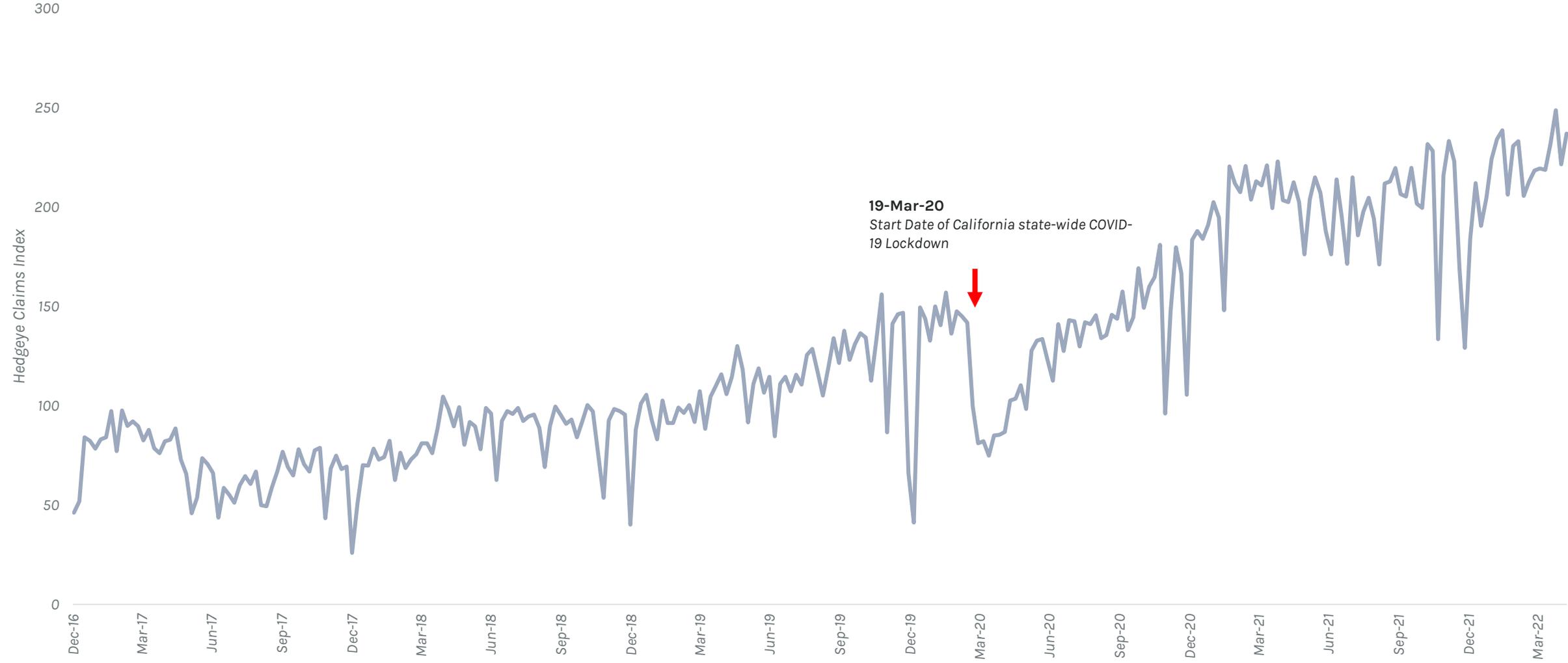
Hedgeye		
Method 1: Seasonal Wkly Distr.		401,233,546
Method 2: Avg Per Day x Total		362,464,517
Method 3: QTD Vol / Ratio Days		350,335,024
Method 4: Last Wkly Data Pt		341,904,868
Method 5: Avg Wkly Vol Carry		350,335,024
Average		361,254,596

Seasonal Weekly Distribution Pattern Based on Prior Years		Average Per Day QTD x Total Days		QTD Volume / Ratio of Completed Days		Last Weekly Data Point Carried Forward		Average Weekly Volume Carried Forward	
Week	Q2-2022	Week	Q2-2022	Week	Q2-2022	Week	Q2-2022	Week	Q2-2022
10	446	10	358	10	323	10	297	10	323
11	472	11	359	11	323	11	297	11	323
12	500	12	359	12	323	12	297	12	323
13	483	13	359	13	323	13	297	13	323
Total	4,804	Total	4,339	Total	4,194	Total	4,093	Total	4,194

Note: 9 of 13 weeks completed in this data set.

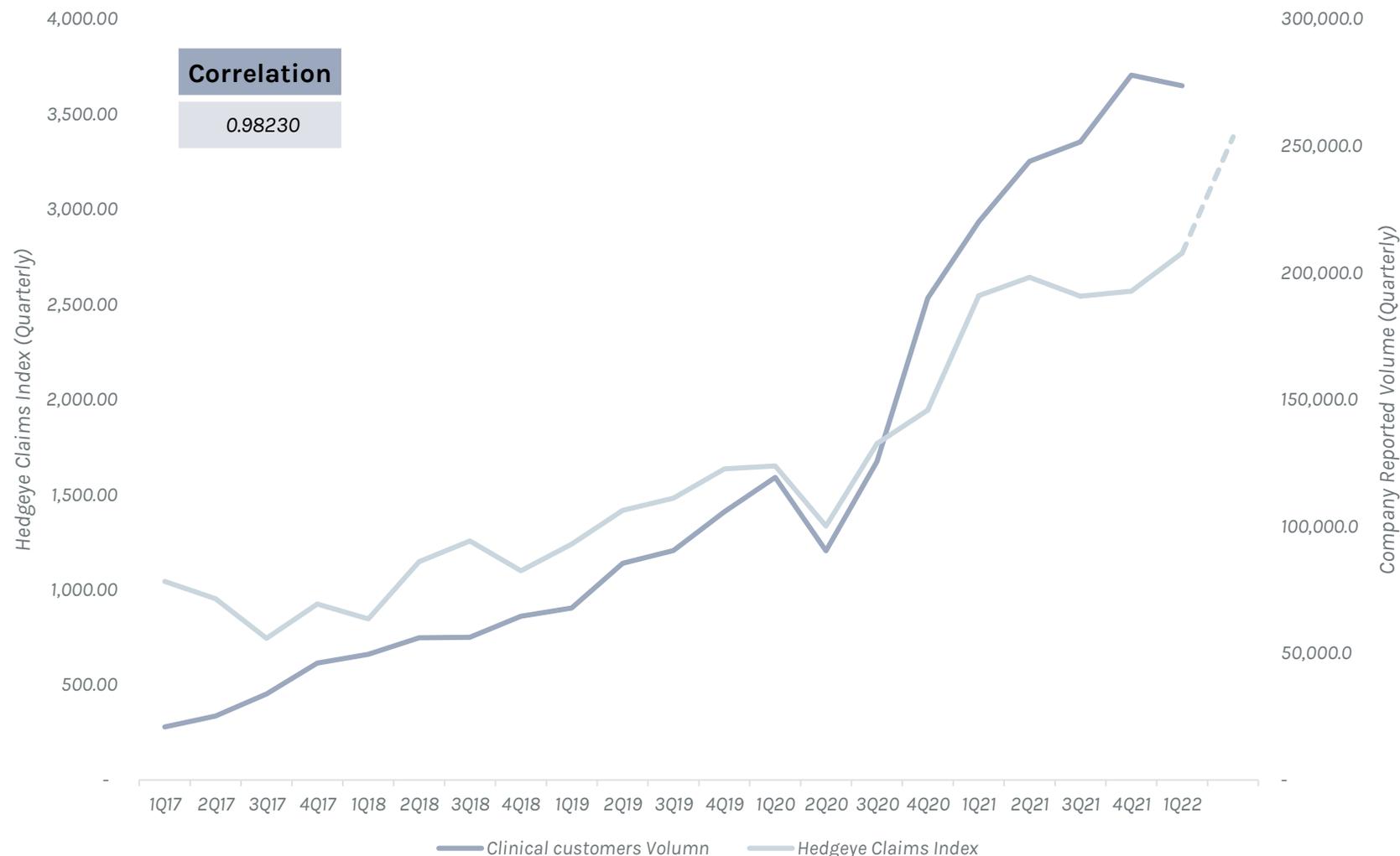
- While previous updates seemed to indicate that Cologuard would have potential upside, the final forecast for the quarter appears to be in-line to slightly below consensus. The February update is in-line with the company's positive pre-announcement this past month.

Claims Index, Weekly



NVTA | Claims Index versus Company Reported

Hedgeye: 334k Billable Tests versus 2Q22 Reported: 326k Billable Tests



Correlation

Claims Data & Reported Claims **98.2%**

Reported Q2-2022

Implied by Consensus
Billable Tests ex. Medicare **325,779**

Hedgeye

- Method 1: Seasonal Wkly Distr. 374,317
- Method 2: Avg Per Day x Total 332,229
- Method 3: QTD Vol / Ratio Days 332,229
- Method 4: Last Wkly Data Pt 298,843
- Method 5: Avg Wkly Vol Carry 332,229

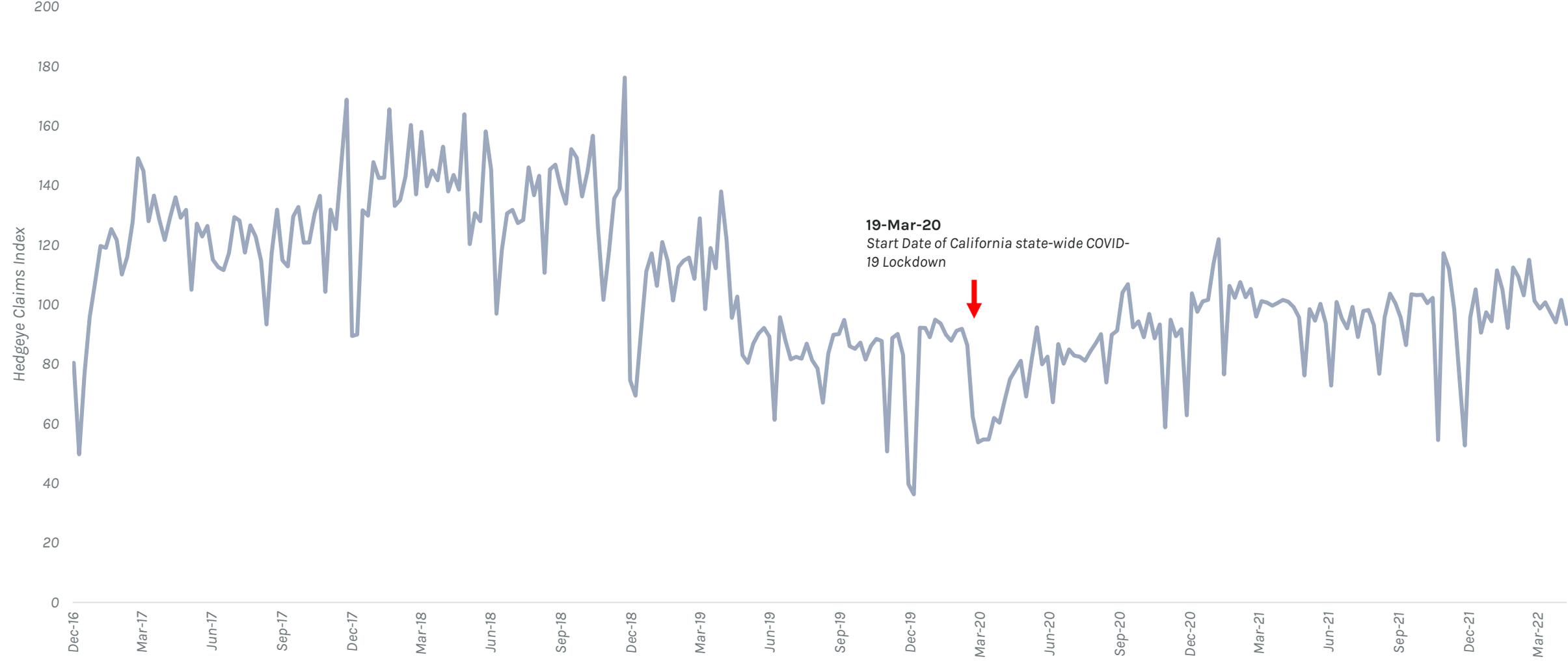
Average **333,969**

2Q22 Earnings Result - 8/10/2022

NVTA shares surged nearly 240% yesterday after the company reported their 2Q22 Earnings Result. Our Claims Data indicated strong volume in the quarter.

Myriad Genetics

Claims Index, Weekly



Myriad Genetics | Claims Forecast

Claims Index Forecasting Method

Week	Q1-2017	Q2-2017	Q3-2017	Q4-2017	FY2017	Q1-2018	Q2-2018	Q3-2018	Q4-2018	FY2018	Q1-2019	Q2-2019	Q3-2019	Q4-2019	FY2019	Q1-2020	Q2-2020	Q3-2020	Q4-2020	FY2020	Q1-2021	Q2-2021	Q3-2021	Q4-2021	FY2021	Q1-2022	Q2-2022
1	50	128	113	113	403	90	140	97	134	461	69	99	61	95	324	36	55	67	104	263	104	101	73	96	374	96	99
2	77	137	112	130	455	132	145	118	152	548	91	119	96	86	392	92	55	87	107	341	98	101	101	86	386	105	101
3	96	129	117	133	475	130	142	131	149	552	111	112	88	85	397	92	62	80	92	327	101	100	95	103	400	91	97
4	107	122	129	121	479	148	153	132	136	569	117	138	82	87	424	89	60	85	94	329	102	101	92	103	398	97	94
5	120	129	128	121	498	143	138	127	145	553	106	122	82	82	392	95	68	83	89	335	114	102	99	103	418	94	102
6	119	136	118	130	503	143	144	128	157	571	121	96	82	86	385	94	75	83	97	348	122	101	89	101	413	112	94
7	125	129	127	137	518	166	139	146	126	576	115	103	87	89	393	90	78	81	89	338	77	99	98	102	376	105	-
8	122	132	123	104	481	133	164	137	102	536	101	83	81	88	354	88	81	84	93	347	106	96	98	55	355	92	-
9	110	105	115	132	462	135	120	143	117	516	113	80	79	51	322	91	69	87	59	306	102	76	93	117	389	113	-
10	116	127	93	125	462	143	131	111	136	520	115	87	67	89	358	92	81	90	95	358	108	99	77	112	395	109	-
11	128	123	117	147	515	160	128	145	139	573	116	90	84	90	380	86	92	74	89	342	103	95	96	98	391	103	-
12	149	126	132	169	576	137	158	147	176	619	109	92	90	83	374	62	80	90	92	324	105	100	104	76	385	115	-
13	145	115	115	90	465	158	145	139	75	517	129	89	90	40	348	54	83	91	63	291	96	94	100	53	343	101	-
Total	1,464	1,638	1,539	1,651	6,293	1,817	1,847	1,703	1,743	7,110	1,413	1,310	1,069	1,050	4,843	1,062	940	1,083	1,164	4,248	1,337	1,263	1,216	1,206	5,021	1,334	586

Seasonal Weekly Distribution Pattern Based on Prior Years

Week	Q2-2022
7	134
8	135
9	108
10	136
11	144
12	136
13	133
Total	1,512

Average Per Day QTD x Total Days

Week	Q2-2022
7	114
8	114
9	115
10	115
11	115
12	115
13	115
Total	1,388

QTD Volume / Ratio of Completed Days

Week	Q2-2022
7	98
8	98
9	98
10	98
11	98
12	98
13	98
Total	1,270

Last Weekly Data Point Carried Forward

Week	Q2-2022
7	94
8	94
9	94
10	94
11	94
12	94
13	94
Total	1,241

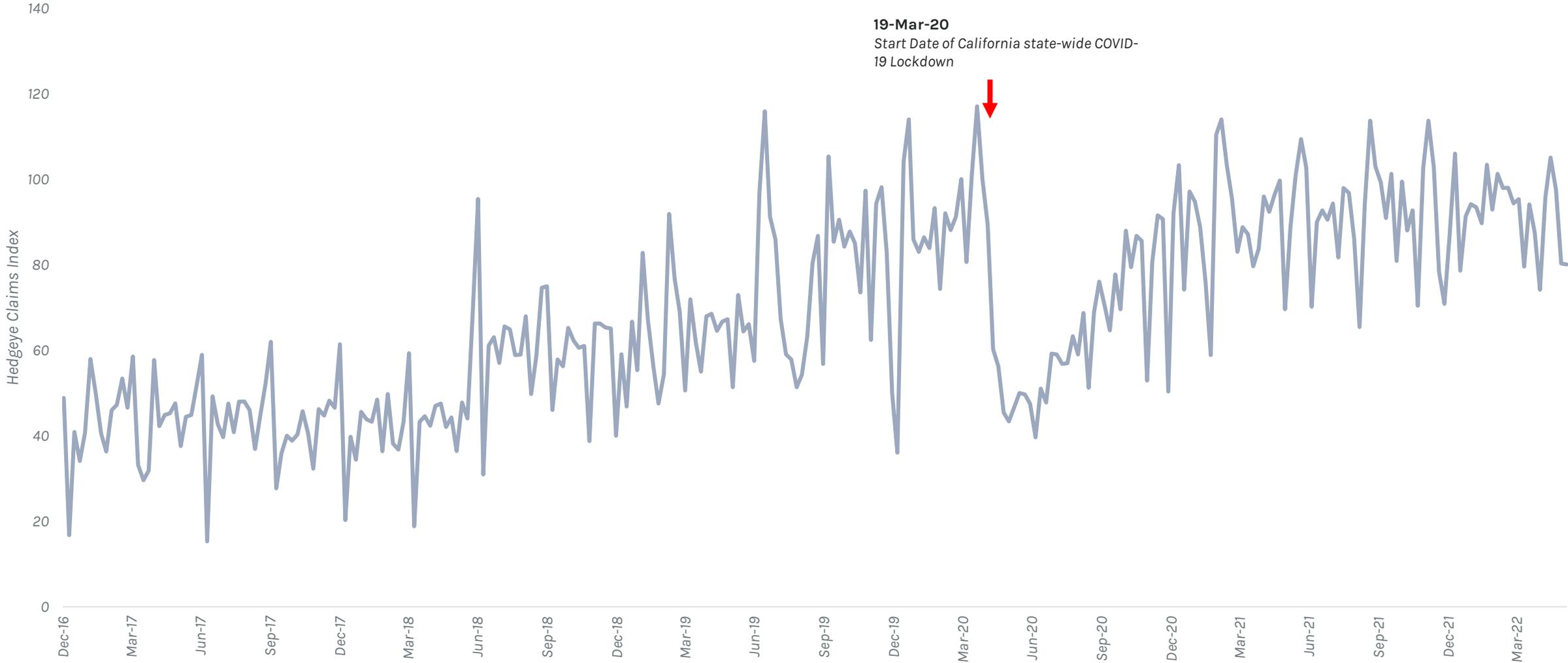
Average Weekly Volume Carried Forward

Week	Q2-2022
7	98
8	98
9	98
10	98
11	98
12	98
13	98
Total	1,270

Note: 6 of 13 weeks completed in this data set.

Myriad has been shedding share and pricing in BRCA testing.

Claims Index, Weekly



Genomic Health | Claims Forecast

Claims Index Forecasting Method

Week	Q1-2017	Q2-2017	Q3-2017	Q4-2017	FY2017	Q1-2018	Q2-2018	Q3-2018	Q4-2018	FY2018	Q1-2019	Q2-2019	Q3-2019	Q4-2019	FY2019	Q1-2020	Q2-2020	Q3-2020	Q4-2020	FY2020	Q1-2021	Q2-2021	Q3-2021	Q4-2021	FY2021	Q1-2022	Q2-2022
1	17	33	15	28	93	20	19	31	46	116	59	72	97	105	334	36	81	40	71	227	92	89	70	99	351	87	95
2	41	30	49	36	156	40	43	61	58	202	47	62	116	86	310	104	101	51	65	321	103	87	90	91	372	106	80
3	34	32	43	40	149	34	45	63	56	199	67	55	91	91	304	114	117	48	78	357	74	80	93	101	348	79	94
4	41	58	40	39	177	46	42	57	65	211	55	68	86	84	294	86	100	59	70	315	97	84	91	81	353	91	88
5	58	42	48	40	188	44	47	66	62	219	83	69	67	88	307	83	89	59	88	320	95	96	94	100	385	94	74
6	50	45	41	46	182	43	48	65	61	217	67	65	59	85	276	87	60	57	80	283	89	93	82	88	351	94	96
7	41	45	48	41	175	49	42	59	61	211	56	67	58	74	255	84	56	57	87	284	76	96	98	93	363	90	105
8	36	48	48	32	165	36	44	59	39	179	48	67	51	97	264	93	45	63	86	288	59	100	97	71	326	104	98
9	46	38	46	46	176	50	37	68	66	221	55	51	54	63	223	74	43	59	53	230	111	70	86	103	369	93	80
10	47	45	37	45	174	38	48	50	66	202	92	73	63	94	323	92	47	69	81	289	114	89	66	114	382	101	80
11	53	45	45	48	191	37	44	59	65	205	77	65	80	98	320	88	50	51	92	281	103	101	94	103	401	98	-
12	47	52	52	47	197	43	69	75	65	252	69	66	87	83	305	91	50	69	91	301	96	110	114	78	397	98	-
13	59	59	62	61	241	59	96	75	40	270	51	58	57	50	215	100	48	76	50	274	83	103	103	71	360	94	-
Total	570	571	574	549	2,264	540	623	788	752	2,703	826	837	968	1,098	3,729	1,134	889	759	990	3,771	1,193	1,197	1,178	1,193	4,760	1,230	891

Correlation

Claims Data & Reported Claims **95.1%**

Reported Q2-2022

Implied by Consensus
U.S. Oncotype DX Tests Revenue ex medicare

Hedgeye

Method 1: Seasonal Wkly Distr. 108,870,706
 Method 2: Avg Per Day x Total 111,137,500
 Method 3: QTD Vol / Ratio Days 108,611,939
 Method 4: Last Wkly Data Pt 106,114,871
 Method 5: Avg Wkly Vol Carry 108,611,939

Average **108,669,391**

Seasonal Weekly Distribution Pattern Based on Prior Years

Week	Q2-2022
11	89
12	93
13	87
Total	1,161

Average Per Day QTD x Total Days

Week	Q2-2022
11	98
12	98
13	98
Total	1,185

QTD Volume / Ratio of Completed Days

Week	Q2-2022
11	89
12	89
13	89
Total	1,158

Last Weekly Data Point Carried Forward

Week	Q2-2022
11	80
12	80
13	80
Total	1,131

Average Weekly Volume Carried Forward

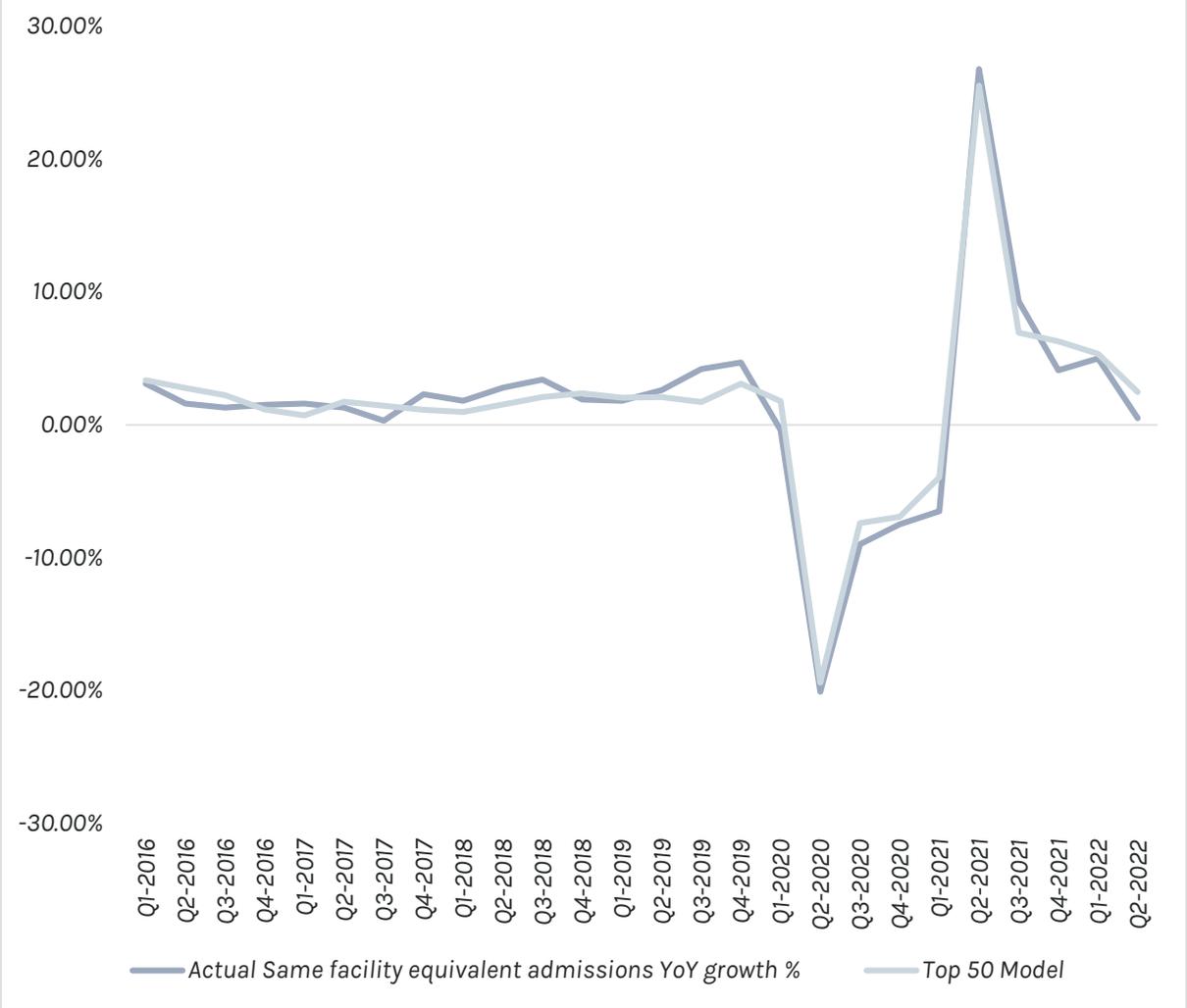
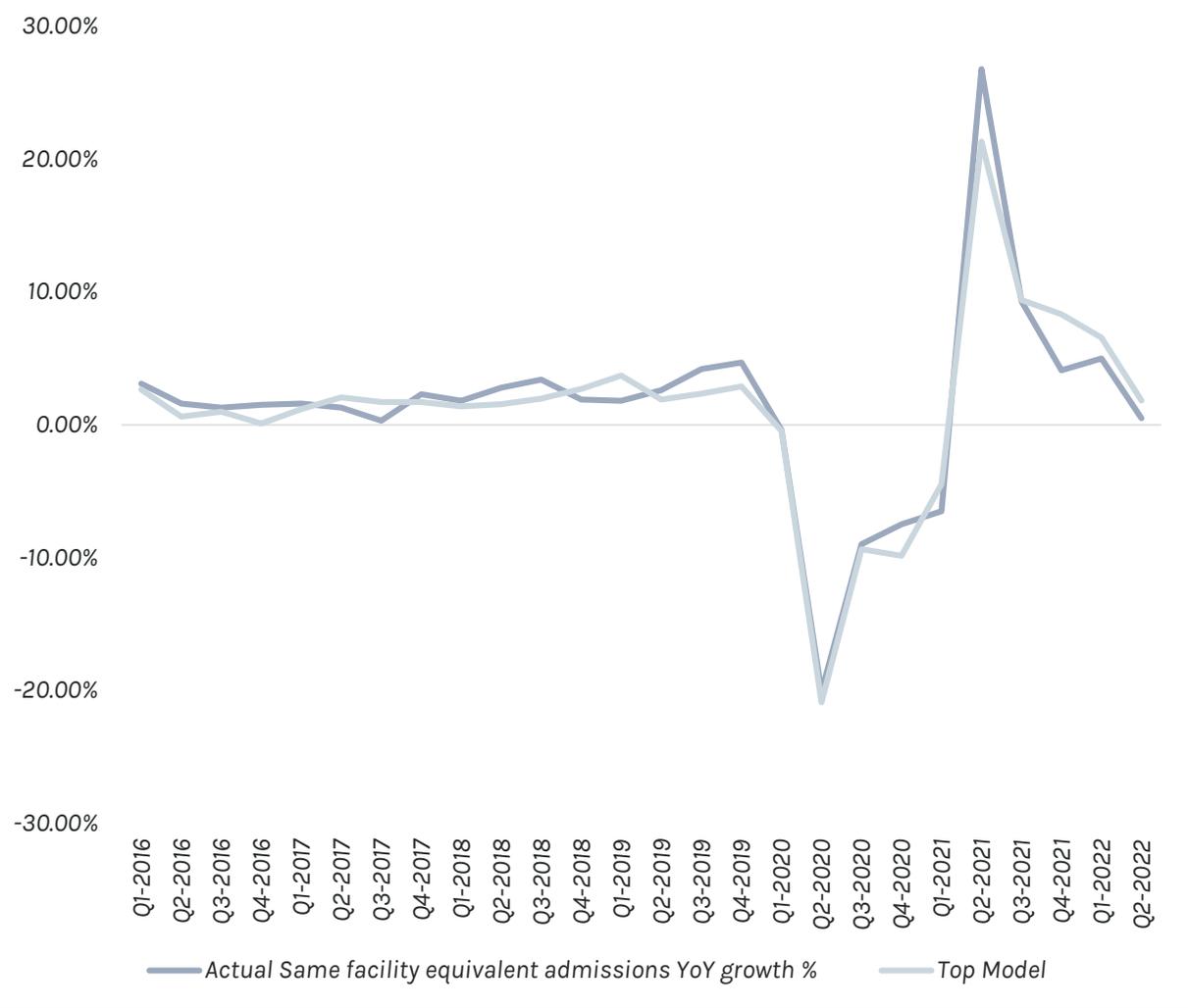
Week	Q2-2022
11	89
12	89
13	89
Total	1,158

Note: 10 of 13 weeks completed in this data set.

Genomic Health has seen a modest recovery which is worth monitoring for other re-opening stocks. As early diagnosis and treatment reaccelerate, we should see more Oncotype use for post treatment therapy selection.

Forecast Algorithm | Same Facility Equivalent Admissions Growth, %

Hurdles the 2Y in 2Q22, Comparisons Ease 2H22



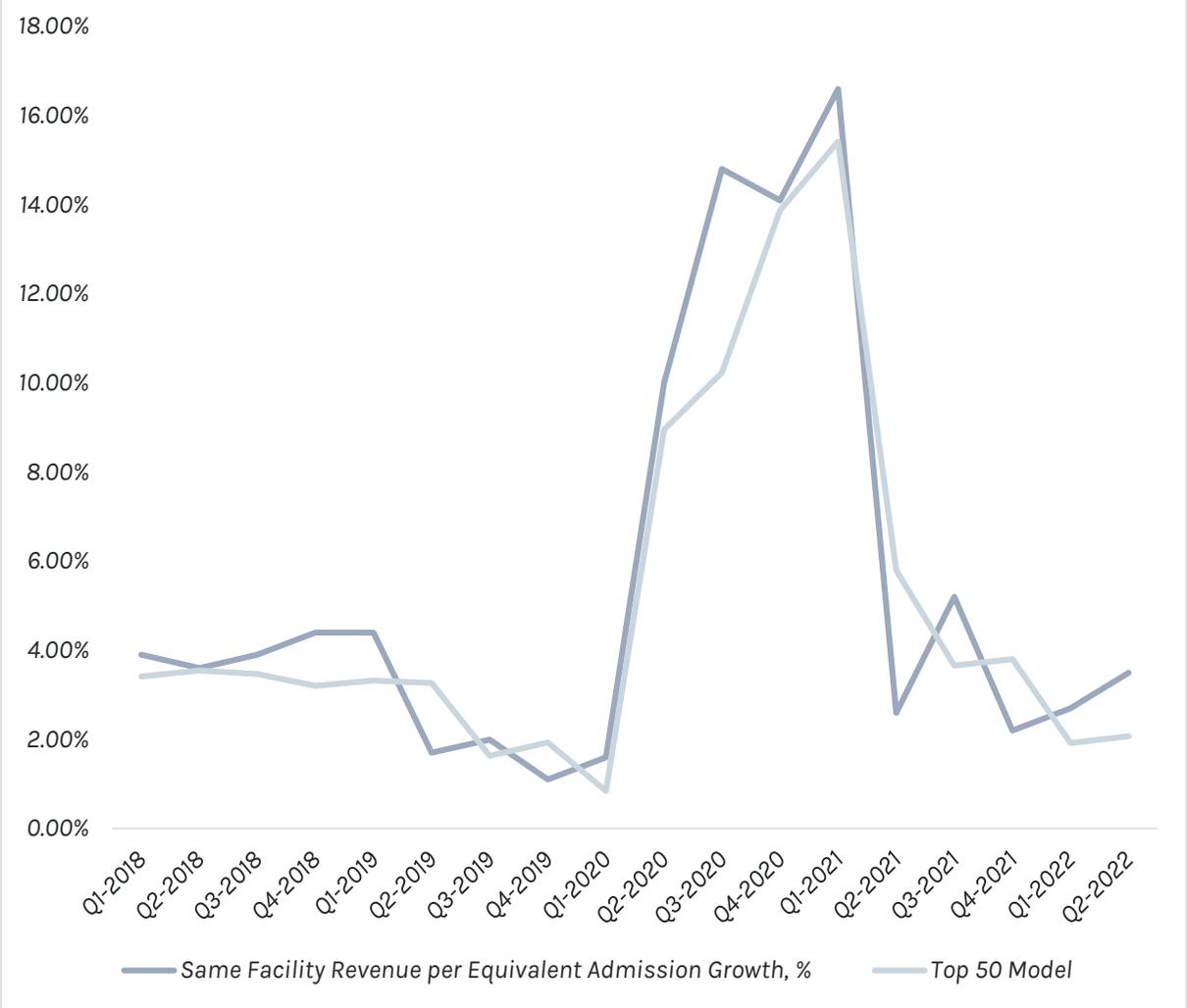
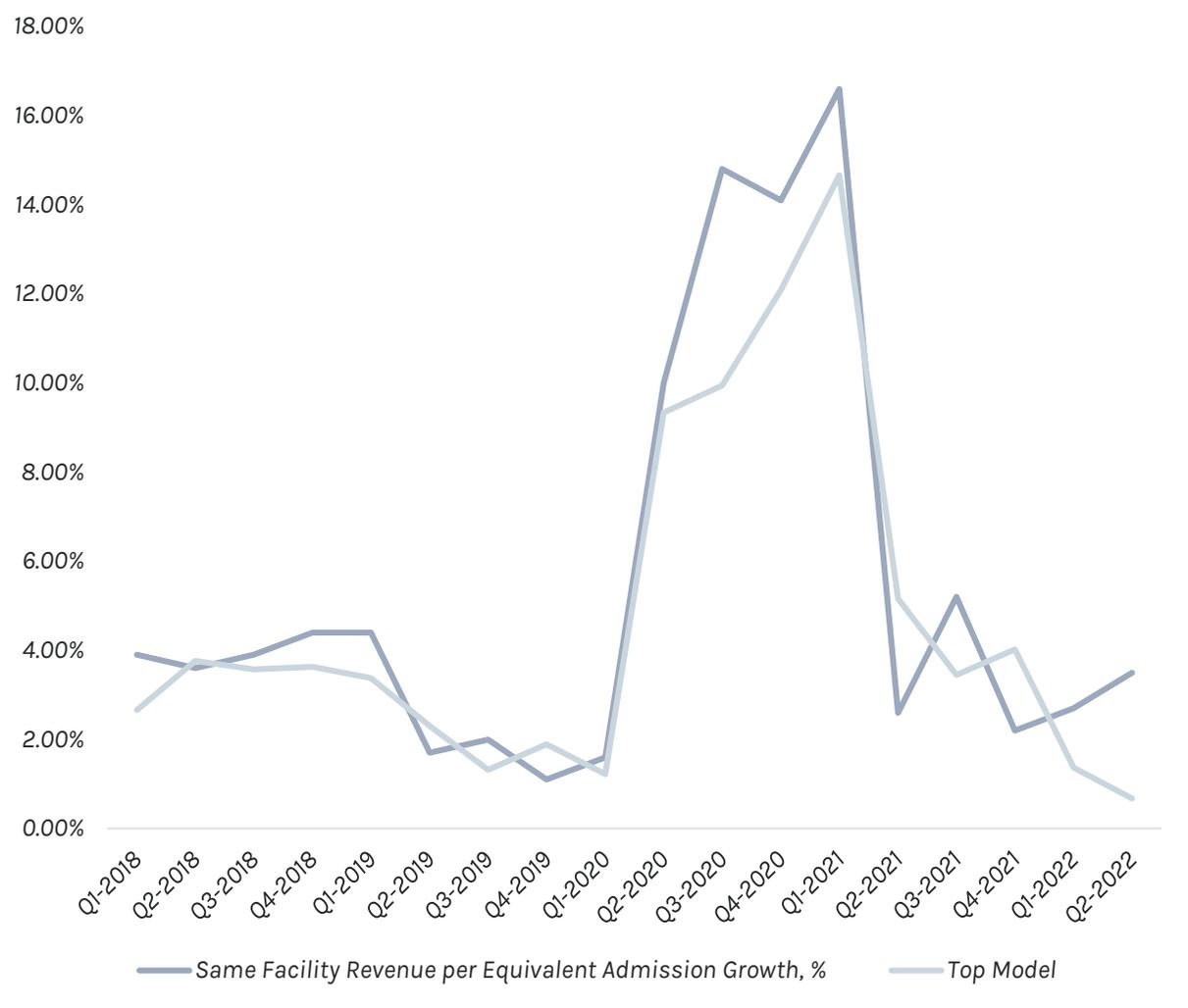
Top Correlations for Same Facility Equivalent Admissions Growth %

Tough comparisons peak in 2Q22

Hedgeye Health Care: Forecast Algorithm Model	Correlation												2Q22 Comp			3Q22 Comp			4Q22 Comp								Y/YA	Q/QA					
		May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22			Q2-2021	Q3-2021	Q4-2021	Q1-2022	Q2-2022
PCE_Dental services	0.962	-41.92	-27.85	-22.66	-18.64	-13.42	-14.72	-16.95	-18.96	-19.83	-18.19	23.71	146.63	57.37	28.67	19.69	10.58	2.47	5.20	10.14	14.48	14.50	12.88	11.91	8.10	7.84	32.94	3.84	4.10	5.41	2.78	-30.16	-2.63
PCE_All other professional medical services	0.962	-5.31	3.38	0.83	-1.32	-1.27	0.14	2.12	3.80	1.47	-1.92	12.82	52.59	15.69	7.65	9.89	11.33	10.64	9.40	7.18	5.99	8.71	11.40	11.76	6.12	3.06	20.74	8.08	2.68	3.98	-8.85	-29.59	-12.83
PCE_Specialty outpatient care facilities and health and allied services	0.961	-11.64	-9.14	-5.65	-2.78	2.20	0.18	-1.63	-2.48	-2.82	-2.39	6.20	48.70	21.38	18.72	15.11	12.32	7.10	8.39	8.86	9.70	10.77	10.75	11.49	10.95	9.82	19.39	6.28	4.68	4.14	2.94	-16.44	-1.20
Women Employees, Thousands, Offices Of Physicians, Except Mental Health, Seasonally Adjusted	0.950	-7.81	-4.47	-3.61	-2.43	-1.85	-1.21	-1.29	-0.90	-1.34	-0.81	0.04	13.69	10.52	6.72	6.02	4.67	3.78	3.24	3.09	2.62	3.03	2.78	3.24	2.97	3.46	16.68	9.13	5.39	5.04	5.22	-11.46	0.18
AGGREGATE WEEKLY HOURS OF PRODUCTION AND NONSUPERVISORY EMPLOYEES, THOUSANDS Education and health services Offices of specialty therapists Seasonally Adjusted	0.944	-19.64	-17.20	-14.98	-12.41	-8.90	-5.83	-5.44	-5.60	-3.61	-4.30	0.50	31.88	26.06	22.32	21.33	17.23	11.01	8.87	9.60	9.99	6.73	9.67	8.05	8.60	6.88	25.62	15.79	7.19	5.39	3.47	-22.14	-1.91
Women Employees, Thousands, Diagnostic Imaging Centers, Seasonally Adjusted	0.938	-16.43	-11.23	-8.57	-8.62	-9.61	-7.59	-6.07	-4.80	-6.02	-5.68	-1.89	28.95	23.64	14.82	13.00	12.26	10.45	9.31	7.36	8.83	9.07	9.20	8.39	5.87	6.09	17.01	12.51	8.90	8.43	5.01	-12.00	-3.42
PCE_Physician services	0.934	-17.71	-4.71	-5.67	-6.41	-1.88	-2.85	-3.12	-4.04	-5.87	-7.63	10.74	61.46	24.84	7.46	9.28	10.18	5.06	5.90	5.89	6.53	5.95	6.92	4.05	3.65	3.60	19.59	3.75	2.68	5.80	4.29	-15.31	-1.51
PCE_Proprietary hospitals	0.925	-18.11	-5.25	0.25	-1.89	-2.94	-0.94	0.00	-1.25	-0.54	-0.81	13.43	59.81	29.22	12.48	7.59	10.72	12.30	8.05	6.55	7.66	7.75	8.46	8.21	5.15	3.93	21.84	5.92	3.51	3.61	-0.25	-22.08	-3.85
PCE_Government hospitals	0.921	-7.81	-4.47	-3.61	-2.43	-1.85	-1.21	-1.29	-0.90	-1.34	-0.81	0.04	13.69	10.52	6.72	6.02	4.67	3.78	3.24	3.09	2.62	3.03	2.78	2.78	3.78	3.78	19.91	-0.03	2.15	4.58	5.16	-14.74	0.58
Indexes Of Aggregate Weekly Payrolls Of All Employees, 2007=100, Offices Of Physicians, Except Mental Health, Seasonally Adjusted	0.917	-8.15	-5.31	-3.42	-2.56	-1.02	-0.43	-0.74	3.92	2.69	0.96	2.37	19.51	15.29	11.61	9.02	6.62	7.43	7.76	7.82	5.32	7.76	9.74	9.95	9.55	10.19	21.92	9.66	7.60	11.56	11.70	-10.22	0.14
PCE_Nonprofit hospitals' services to households	0.914	-16.39	-6.71	-4.11	-3.65	-3.50	-1.10	0.63	-0.18	-0.18	0.22	32.91	58.56	26.87	14.25	10.81	10.62	11.18	7.59	5.54	6.72	5.97	5.10	3.86	2.52	2.36	15.13	5.95	1.86	-0.44	-2.51	-17.64	-2.07
PRODUCTION AND NONSUPERVISORY EMPLOYEES, THOUSANDS Education and health services Offices of specialty therapists Seasonally Adjusted	0.909	-19.34	-16.89	-16.54	-15.25	-12.81	-10.54	-8.83	-9.33	-9.12	-8.42	-6.27	22.90	19.78	16.27	17.05	16.39	13.03	11.66	9.99	9.99	8.67	9.67	9.60	8.60	6.88	17.02	19.56	11.85	9.00	6.22	-10.80	-2.78
Indexes Of Aggregate Weekly Payrolls Of All Employees, 2007=100, Health Care, Seasonally Adjusted	0.891	-4.06	-1.17	-0.06	0.75	1.10	1.09	1.49	4.25	3.72	2.21	3.37	15.60	12.27	9.24	8.27	7.24	7.49	8.03	7.77	6.12	7.40	8.76	8.78	8.89	9.23	20.51	10.94	9.32	11.49	11.76	-8.75	0.27
INDEXES OF AGGREGATE WEEKLY PAYROLLS OF PRODUCTION AND NONSUPERVISORY EMPLOYEES, 2002=100 Education and health services Offices of specialty therapists Seasonally Adjusted	0.887	-14.05	-13.57	-14.77	-12.69	-8.96	-5.04	-5.53	-1.30	-2.93	-3.77	3.00	32.00	24.22	22.18	24.77	21.88	16.42	14.87	16.07	12.37	13.78	17.58	15.77	13.55	12.01	23.18	20.25	9.99	9.88	5.18	-18.00	-4.70
AGGREGATE WEEKLY PAYROLLS OF ALL EMPLOYEES, THOUSANDS Education and health services Offices of optometrists Seasonally Adjusted	0.881	-25.31	-6.38	-6.27	-5.99	0.38	0.58	-0.37	0.68	-2.10	-4.57	7.13	144.20	49.27	17.68	17.50	17.70	8.68	12.09	13.32	11.08	9.42	19.90	8.69	6.76	3.35	28.22	2.72	2.27	2.53	-1.48	-29.70	-4.01
PRODUCTION AND NONSUPERVISORY EMPLOYEES, THOUSANDS Education and health services Offices of chiropractors Seasonally Adjusted	0.877	-16.25	-6.33	-1.98	-0.47	-1.32	-1.53	-0.10	-0.19	-0.47	0.86	3.79	35.29	19.96	11.49	5.49	3.40	4.51	7.38	4.87	4.68	2.93	3.86	2.34	1.57	2.59	19.17	1.93	4.16	-0.48	-1.31	-20.48	-0.84
Indexes Of Aggregate Weekly Payrolls Of Production And Nonsupervisory Employees, 2002=100, Health Care, Seasonally Adjusted	0.876	-3.38	-0.55	-0.04	0.96	1.83	2.32	3.13	5.26	3.66	2.16	3.58	17.83	14.60	11.50	10.68	10.17	9.90	9.31	8.14	7.02	8.85	10.36	9.95	9.49	9.19	22.42	13.66	7.14	10.61	7.10	-15.32	-3.51
Production And Nonsupervisory Employees, Thousands, Diagnostic Imaging Centers, Seasonally Adjusted	0.873	-13.11	-8.16	-5.07	-6.03	-7.30	-5.06	-4.37	-2.59	-1.71	-1.42	1.01	27.59	24.36	13.89	12.56	8.70	8.18	5.93	3.68	5.01	2.17	2.45	3.30	0.43	-1.93	19.00	9.55	3.54	0.75	-2.80	-21.80	-3.55
Aggregate weekly hours of all employees, thousands, diagnostic imaging centers, seasonally adjusted	0.856	-20.52	-10.33	-6.77	-6.11	-9.08	-4.90	-5.78	-0.80	-0.21	0.48	10.93	47.69	30.21	18.84	13.39	9.60	12.16	3.52	1.63	-0.77	-3.92	-2.96	-3.18	-5.49	-0.04	17.83	6.12	-2.49	-6.09	-3.25	-21.08	2.84
Women Employees, Thousands, Health Care, Seasonally Adjusted	0.856	-7.10	-4.64	-4.12	-3.79	-3.54	-3.27	-3.28	-3.02	-3.73	-3.56	-3.04	8.22	5.67	2.63	2.17	1.57	1.13	0.81	0.67	0.36	0.88	0.90	1.09	1.18	1.35	10.40	7.99	7.49	8.11	8.92	-1.48	0.80
Aggregate weekly hours of all employees, thousands, medical laboratories, seasonally adjusted	0.830	-10.36	-7.49	-1.26	-1.65	2.07	3.13	1.47	4.28	4.76	5.15	7.03	22.08	20.07	18.25	9.56	10.43	7.29	4.50	6.78	2.22	2.81	3.20	3.11	1.75	2.64	16.96	6.07	-1.40	-4.39	-4.23	-21.18	0.17
INDEXES OF AGGREGATE WEEKLY PAYROLLS OF PRODUCTION AND NONSUPERVISORY EMPLOYEES, 2002=100 Education and health services Offices of optometrists Seasonally Adjusted	0.808	-27.80	-4.73	0.57	0.47	4.14	1.94	1.52	4.95	0.64	-1.02	5.97	165.03	52.43	15.87	5.16	10.90	4.76	6.83	3.51	0.96	-0.20	6.87	2.74	4.46	4.73	23.72	-3.05	-2.93	-2.28	1.12	-22.60	3.41
Average Weekly Hours Of Production And Nonsupervisory Employees, General Medical And Surgical Hospitals, Seasonally Adjusted	0.801	-3.78	-1.90	-1.35	-0.54	-0.54	0.27	1.08	1.08	0.54	-0.54	-0.82	4.26	3.37	1.93	1.10	0.54	1.36	0.27	-1.61	-1.61	-1.08	0.55	0.55	0.27	0.54	9.84	4.50	-8.31	-0.57	3.55	-6.30	4.12
Indexes Of Aggregate Weekly Hours Of Production And Nonsupervisory Employees, 2002=100, Diagnostic Imaging Centers, Seasonally Adjusted	0.795	-22.36	-12.45	-7.32	-8.82	-11.15	-5.01	-1.20	4.56	8.26	9.74	17.04	50.09	45.78	24.02	20.50	13.99	16.47	8.08	2.81	-0.37	-7.87	-4.77	-3.09	-4.97	-6.37	17.01	7.15	-3.29	-8.63	-4.59	-21.60	4.04
Indexes Of Aggregate Weekly Payrolls Of All Employees, 2007=100, Diagnostic Imaging Centers, Seasonally Adjusted	0.790	-18.29	-8.69	-0.08	-2.03	-0.08	-2.84	-0.77	7.40	5.84	2.66	12.06	49.47	34.37	22.77	12.65	10.51	12.30	11.61	8.30	1.89	0.00	-0.07	2.53	-0.50	5.13	20.15	2.56	-0.42	-6.73	-2.48	-22.62	4.26

Forecast Algorithm | Same Facility Rev per Eq Admission Growth, %

Equivalent admissions 'pricing' better than expected

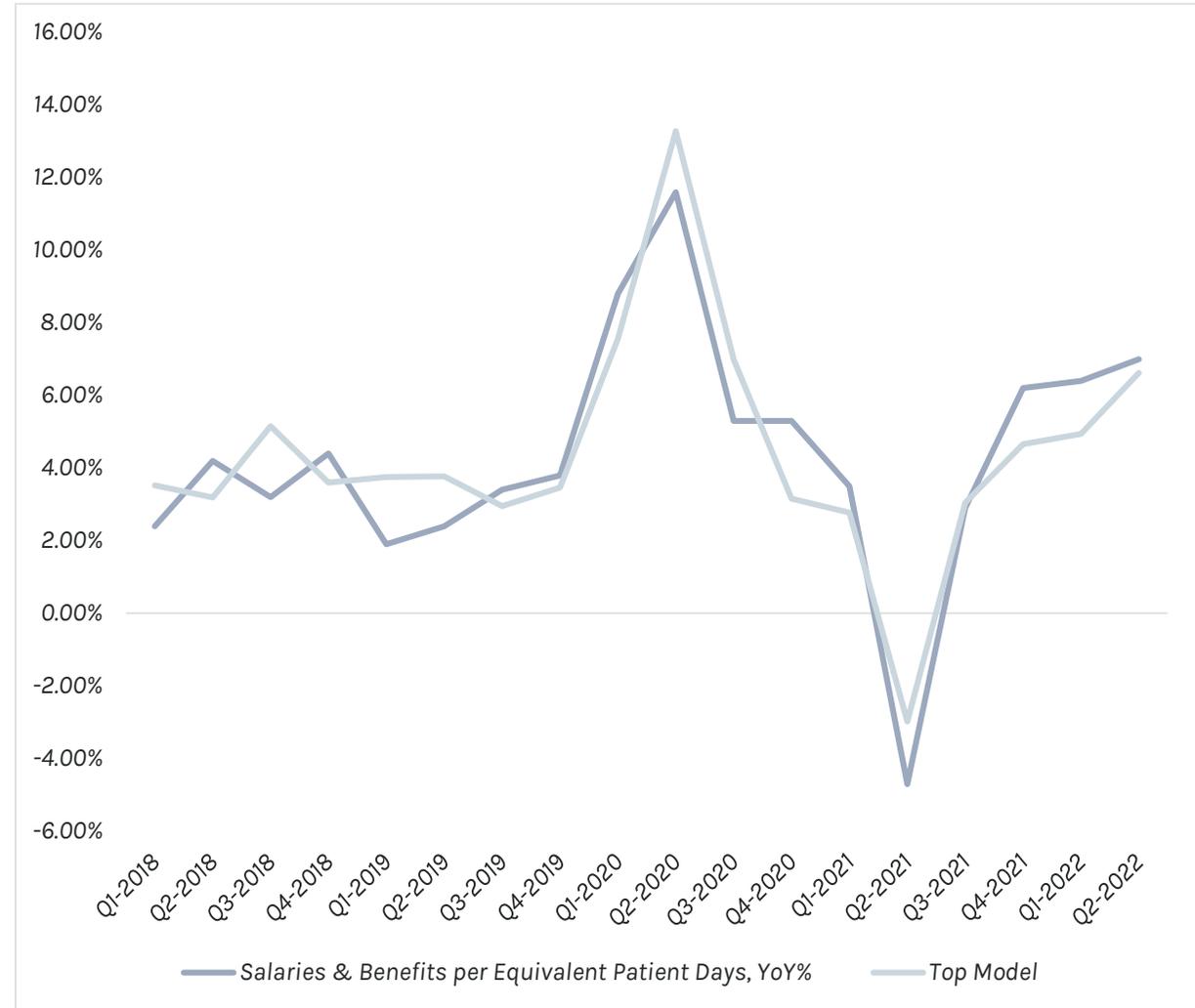
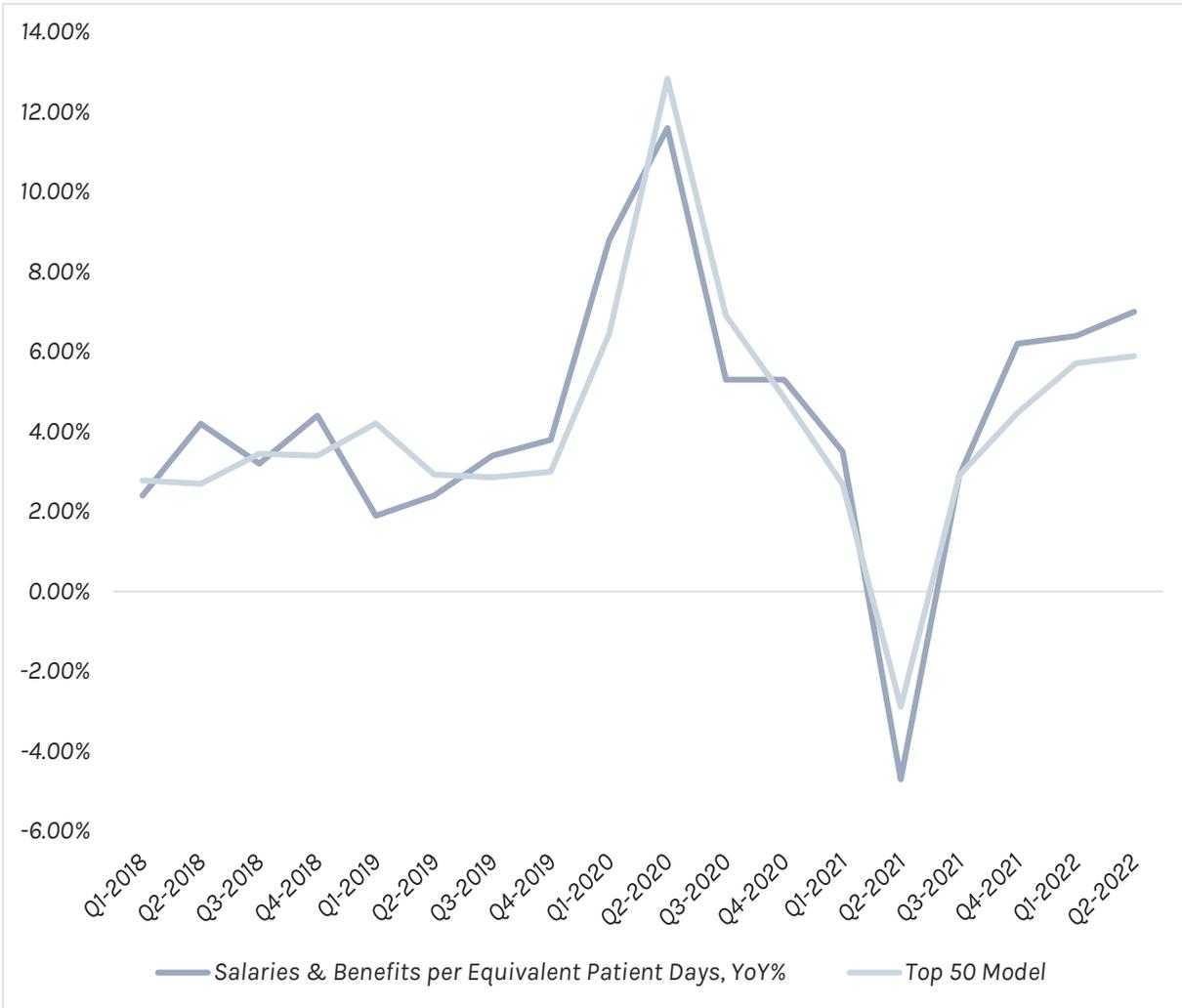


Forecast Algorithm | SF Revenue per Eq Admission Growth, %

Hedgeye Health Care: Forecast Algorithm Model	Correlation	2022												2Q22 Comp			3Q22 Comp			4Q22 Comp			2022				Y/YA	Q/QA					
		Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22			Q2-2021	Q3-2021	Q4-2021	Q1-2022	Q2-2022
AVERAGE HOURLY EARNINGS OF PRODUCTION AND NONSUPERVISORY EMPLOYEES, 1982-84 DOLLARS Education and health services Offices of chiropractors Seasonally Adjusted	0.785	5.59	8.16	8.67	5.87	8.53	8.45	12.20	16.09	13.59	17.40	12.82	12.13	5.94	5.24	2.91	5.16	1.77	6.51	10.37	6.68	7.64	0.58	2.66	2.16	2.20	8.46	6.50	10.00	1.10	1.19	-7.27	0.09
AVERAGE WEEKLY HOURS OF PRODUCTION AND NONSUPERVISORY EMPLOYEES Education and health services Continuing care retirement communities Seasonally Adjusted	0.683	3.22	1.91	0.96	1.29	2.59	4.22	3.57	3.25	4.55	4.56	4.21	3.87	0.31	0.63	2.87	4.15	1.26	-0.62	0.31	0.63	0.31	-0.93	-0.62	-1.86	-0.62	8.99	8.52	1.21	-5.20	-0.92	-9.92	4.28
AVERAGE WEEKLY EARNINGS OF ALL EMPLOYEES, 1982-1984 DOLLARS Education and health services Continuing care retirement communities Seasonally Adjusted	0.660	7.34	8.70	4.75	4.20	5.72	6.58	6.80	7.36	7.46	7.13	5.29	4.01	-1.66	-2.68	1.06	2.54	0.87	0.51	1.18	1.74	3.02	2.98	3.73	2.62	2.47	1.78	5.99	7.38	8.73	5.34	3.55	-3.39
Average Weekly Earnings Of Production And Nonsupervisory Employees, 1982-84 Dollars, Nursing Care Facilities, Seasonally Adjusted	0.633	6.65	8.07	6.34	4.47	5.45	5.64	5.79	7.35	7.42	7.66	5.32	3.16	-0.50	-2.12	0.59	2.01	1.07	1.84	1.67	-0.47	0.00	-0.69	1.45	1.44	1.93	-2.50	5.54	4.80	4.35	4.17	6.67	-0.18
PPI industry data for Nursing care facilities-Medicare and Medicaid patients, not seasonally adjusted	0.627	3.33	4.67	4.81	4.73	5.04	4.89	5.66	5.47	5.52	5.54	5.30	5.02	3.85	2.70	3.09	2.98	2.99	2.93	1.99	2.46	2.33	2.18	1.72	1.81	2.53	4.13	1.92	0.18	-0.43	1.78	-2.34	2.22
AVERAGE WEEKLY EARNINGS OF PRODUCTION AND NONSUPERVISORY EMPLOYEES, 1982-84 DOLLARS Education and health services Continuing care retirement communities Seasonally Adjusted	0.564	7.48	7.63	2.98	1.40	3.94	6.45	5.69	6.02	7.39	6.89	5.09	2.79	-3.07	-4.15	1.45	5.12	2.47	0.91	1.87	1.92	2.76	2.54	3.30	1.93	3.49	2.62	9.76	8.45	8.45	7.40	4.78	-1.05
Average Weekly Hours Of Production And Nonsupervisory Employees, Home Health Care Services, Seasonally Adjusted	0.559	1.44	3.61	2.52	2.89	2.53	3.62	3.26	3.25	2.52	4.32	2.86	3.93	2.48	0.70	1.05	1.05	2.11	1.40	1.05	0.70	2.11	0.69	1.39	-0.34	-1.38	8.24	6.29	2.95	-1.72	-2.20	-10.45	-0.49
AVERAGE HOURLY EARNINGS OF ALL EMPLOYEES, 1982-1984 DOLLARS Education and health services Continuing care retirement communities Seasonally Adjusted	0.558	4.12	5.78	2.74	2.05	2.47	3.44	3.86	4.85	4.56	3.99	2.05	1.22	-1.32	-2.60	-0.13	0.67	1.20	0.80	2.12	1.45	2.11	3.31	3.75	3.21	3.07	1.12	7.47	9.96	13.17	8.44	7.32	-4.73
Average Weekly Earnings Of All Employees, 1982-1984 Dollars, Health Care, Seasonally Adjusted	0.555	0.55	2.11	2.44	2.59	2.78	2.78	2.69	3.22	5.60	5.72	3.85	3.19	3.16	1.52	0.83	0.69	0.30	0.92	0.79	-0.01	-1.55	-1.24	-0.57	-1.07	-0.80	8.91	4.55	1.21	-1.06	0.84	-8.07	1.90
Average Weekly Earnings Of Production And Nonsupervisory Employees, 1982-84 Dollars, Health Care, Seasonally Adjusted	0.552	2.40	3.61	3.79	2.91	3.11	3.54	4.07	4.89	6.71	5.85	3.85	3.34	4.44	2.80	1.95	2.36	2.56	2.80	1.65	0.10	-0.96	-0.32	0.62	-0.32	-0.38	9.52	7.23	-2.31	0.11	-1.01	-10.53	-1.12
PPI industry data for Home health care services-Medicare patients, not seasonally adjusted	0.527	1.07	3.06	3.06	3.13	3.13	3.13	3.82	3.82	3.82	3.93	3.93	3.93	3.93	1.93	1.93	1.88	1.88	1.88	1.88	1.88	1.88	2.79	2.79	2.79	1.77	9.28	5.05	4.48	8.70	0.79	-8.49	-7.91
PPI industry data for General medical and surgical hospitals by patient type-Medicare patients, not seasonally adjusted	0.525	2.80	4.75	4.75	4.69	4.40	4.46	3.76	3.76	3.87	3.16	3.62	3.68	3.62	1.69	1.69	1.67	1.84	1.90	1.27	1.27	1.21	1.89	1.78	1.73	0.76	2.00	-0.52	1.81	4.27	-2.29	-4.29	-6.56
Average Hourly Earnings Of All Employees, 1982-1984 Dollars, Health Care, Seasonally Adjusted	0.511	2.38	2.98	2.20	1.69	1.60	1.61	1.52	2.28	4.08	3.92	3.57	2.02	0.75	0.00	-0.08	0.42	0.58	1.50	1.08	0.33	-0.98	-0.33	-0.90	-1.07	-1.07	4.16	7.06	3.31	-1.60	-0.96	-5.11	0.64
Average Weekly Hours Of All Employees, Home Health Care Services, Seasonally Adjusted	0.511	1.40	2.46	1.75	2.11	1.76	3.18	3.18	1.41	1.76	2.47	1.05	2.84	-0.34	-0.68	0.00	0.00	0.69	-0.34	-0.34	1.39	2.42	1.72	2.42	1.38	1.04	6.11	6.06	9.55	12.19	8.05	1.94	-4.14
Average Hourly Earnings Of Production And Nonsupervisory Employees, 1982-84 Dollars, Health Care, Seasonally Adjusted	0.498	4.62	4.90	3.84	2.60	2.51	2.60	2.59	3.34	5.10	3.99	3.51	2.38	0.99	0.63	0.72	1.45	2.27	2.80	1.89	1.35	-0.09	0.89	0.36	-0.36	-0.36	2.03	8.39	5.46	-0.75	-3.44	-5.47	-2.69
Average Hourly Earnings Of All Employees, 1982-1984 Dollars, Diagnostic Imaging Centers, Seasonally Adjusted	0.477	5.15	2.50	1.07	6.04	2.98	8.43	1.01	4.10	6.97	4.59	0.41	-1.56	-2.81	-1.62	-1.88	-5.62	-4.18	-4.95	1.50	-0.25	-4.13	-3.19	-4.54	-2.50	-2.73	3.74	-1.03	8.23	4.28	4.75	1.01	0.46
AVERAGE WEEKLY HOURS OF ALL EMPLOYEES Education and health services Outpatient mental health centers Seasonally Adjusted	0.469	0.88	1.46	1.17	1.46	1.75	2.93	2.64	2.64	1.45	3.82	1.75	0.87	0.58	0.29	1.45	0.29	0.00	-0.57	1.14	0.86	1.15	0.00	0.86	1.73	1.15	6.23	0.26	8.77	6.32	3.84	-2.39	-2.48
Average Weekly Earnings Of Production And Nonsupervisory Employees, Home Health Care Services, Seasonally Adjusted	0.457	7.89	11.18	10.38	9.90	9.67	9.12	8.36	8.84	8.58	10.26	8.16	8.39	7.22	4.00	4.45	5.30	5.56	6.60	7.36	6.22	7.26	5.73	6.31	4.49	2.83	-0.70	3.50	8.02	2.52	-3.39	-2.69	-5.91
AVERAGE WEEKLY HOURS OF ALL EMPLOYEES Education and health services Offices of specialty therapists Seasonally Adjusted	0.455	-2.83	-0.35	1.06	3.58	4.29	3.56	2.85	2.85	3.23	4.30	3.20	5.43	5.45	3.20	1.05	0.00	-2.40	-3.09	-2.08	-1.73	-0.69	-2.06	-1.38	-2.06	-0.34	14.39	4.49	6.62	3.06	5.31	-9.08	2.25
Average Hourly Earnings Of All Employees, Home Health Care Services, Seasonally Adjusted	0.442	5.16	6.86	6.65	6.52	6.63	5.87	5.21	6.75	7.36	6.82	6.70	5.82	5.29	4.23	4.84	4.96	4.60	5.91	6.57	4.96	4.96	5.52	4.70	5.00	4.35	3.17	6.43	7.55	3.33	-10.33	-13.50	-13.66
AVERAGE WEEKLY EARNINGS OF ALL EMPLOYEES Education and health services Offices of specialty therapists Seasonally Adjusted	0.434	0.59	5.26	4.21	4.00	4.11	4.49	3.66	2.95	5.85	5.92	5.81	7.33	5.56	2.11	1.97	4.04	0.99	0.46	0.79	1.33	1.38	1.79	3.71	3.71	3.77	10.08	6.87	2.47	7.99	10.98	0.91	3.00
PPI industry data for Surgical appliance and supplies mfg-Secondary products, not seasonally adjusted	0.429	2.32	1.66	1.66	1.66	3.68	2.62	2.75	2.75	2.81	2.61	1.32	1.70	1.76	1.76	1.76	1.65	0.31	0.25	0.12	0.12	0.12	0.26	0.29	0.05	0.05	7.47	-1.83	1.44	2.29	2.55	-4.93	0.26
AVERAGE WEEKLY EARNINGS OF PRODUCTION AND NONSUPERVISORY EMPLOYEES, 1982-84 DOLLARS Education and health services Offices of specialty therapists Seasonally Adjusted	0.398	-0.23	6.53	3.35	1.08	1.59	2.82	4.80	2.36	7.42	5.20	3.09	6.65	2.62	-1.75	-0.91	0.65	-1.01	-2.78	-3.74	-1.93	-5.32	-3.32	-1.33	-3.43	-3.99	6.35	4.55	-0.73	2.62	-0.03	-6.39	-2.65
AVERAGE WEEKLY EARNINGS OF ALL EMPLOYEES, 1982-1984 DOLLARS Education and health services Offices of specialty therapists Seasonally Adjusted	0.397	0.22	5.01	3.46	2.93	2.75	3.05	2.45	1.79	4.52	4.50	4.07	4.55	1.35	-2.69	-3.20	-1.18	-4.00	-4.68	-5.13	-5.15	-5.33	-5.33	-3.90	-4.47	-4.11	3.14	0.64	-0.46	1.87	4.09	0.95	2.22
Average Hourly Earnings Of All Employees, 1982-1984 Dollars, General Medical And Surgical Hospitals, Seasonally Adjusted	0.396	3.76	3.84	2.97	2.21	1.67	1.52	0.68	2.04	4.26	4.26	4.25	2.19	0.37	0.00	-0.22	0.89	1.64	2.62	2.02	1.26	0.00	-0.36	-0.80	-0.52	-0.52	0.59	8.93	7.31	-1.58	0.65	0.06	2.23

Forecast Algorithm | SWB per Equivalent Patient Days

Roll- off in Temp Staffing Volume adds Supply to Market; Likely Easing in Back Half



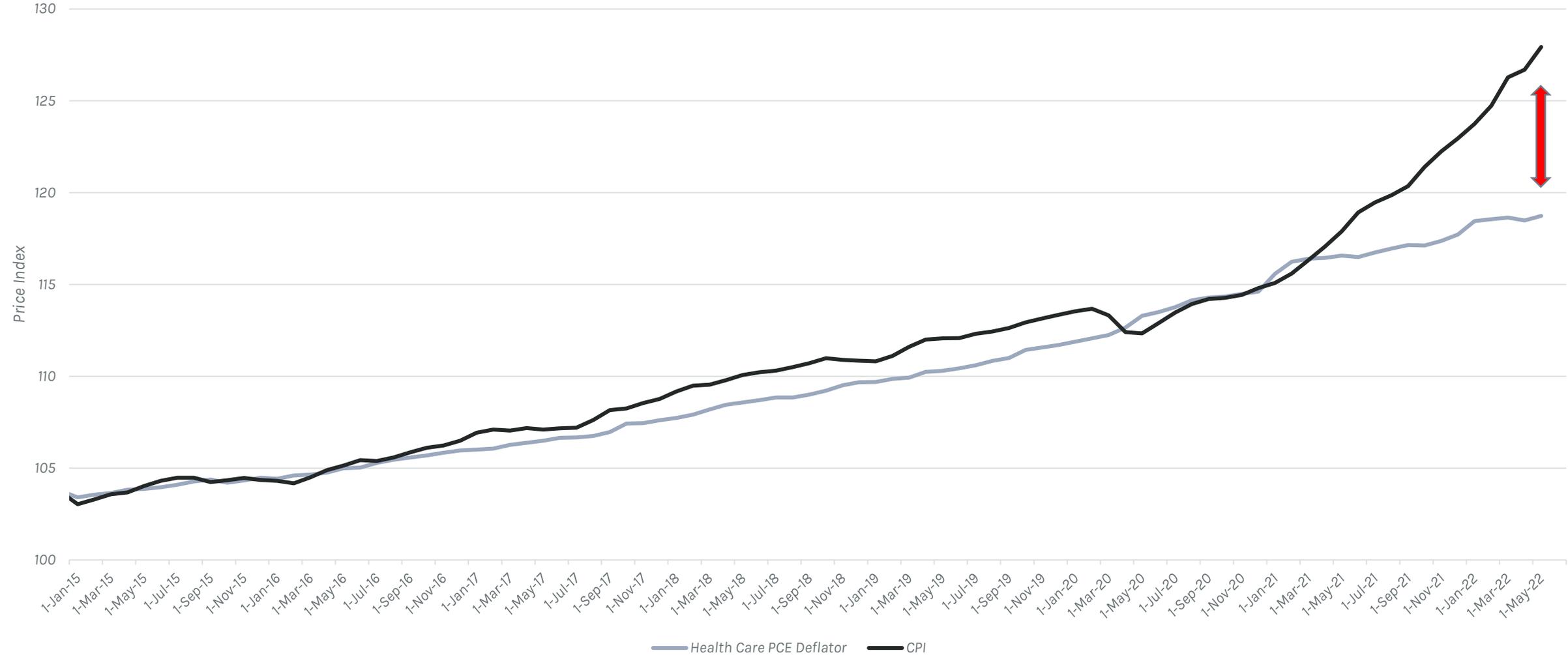
Forecast Algorithm | SWB per Equivalent Patient Days

Each of the following features backtests as statistically significant with respect to predicting the rate of change

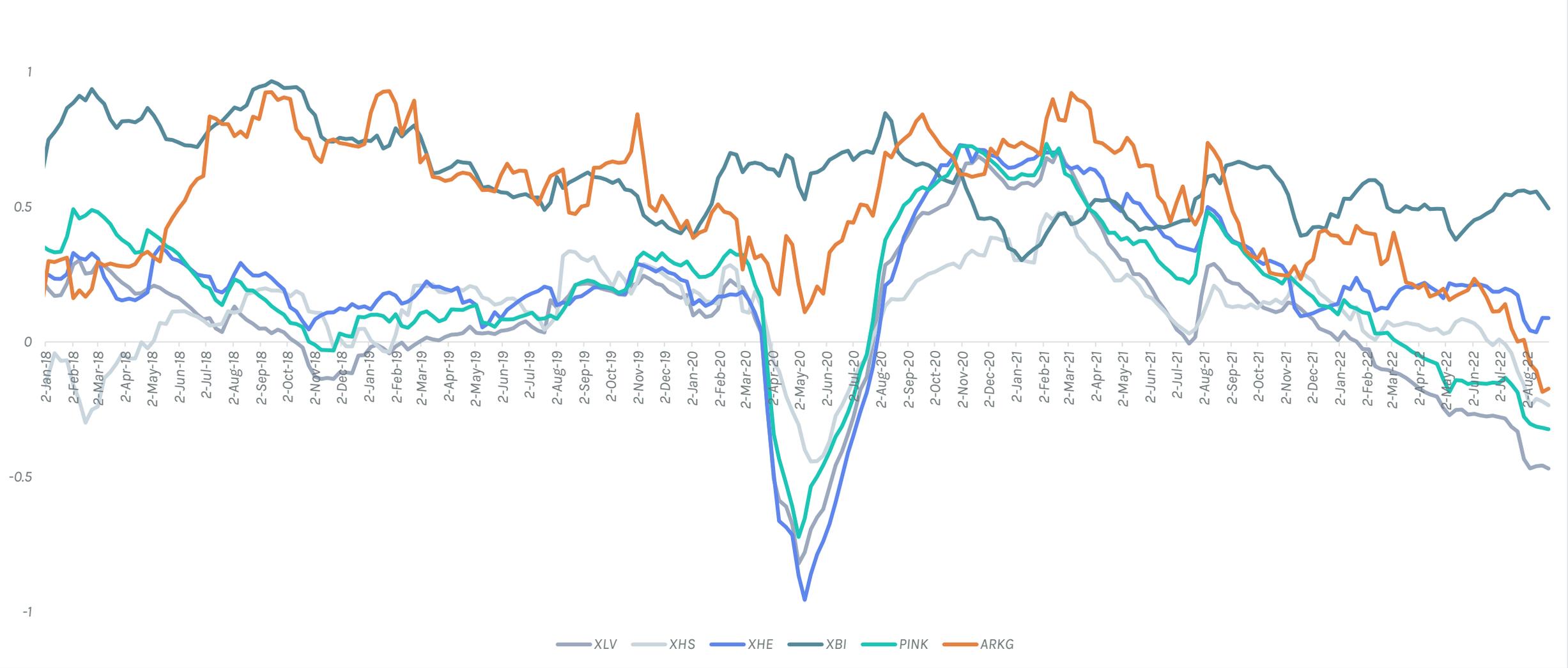
Hedgeye Health Care: Forecast Algorithm Model	Correlation	2020												2Q22 Comp			3Q22 Comp			4Q22 Comp			2022			Q1-2021	Q2-2021	Q3-2021	Q4-2021	Q1-2022	Y/YΔ	Q/QΔ	
		Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22								Mar-22
Health care and social assistance Total US All areas Layoffs and discharges All size classes Level - In Thousands Not seasonally adjusted	0.682	877.60	459.31	61.03	26.09	-1.08	48.54	-12.59	-22.22	20.69	-8.08	-7.56	1.69	-92.64	-85.57	-41.55	-30.54	-51.91	-49.67	-5.60	-12.50	-35.71	43.96	3.77	-25.83	0.00	2.99	3.68	2.28	3.67	5.04	2.05	1.37
Health care and social assistance Total US All areas Total separations All size classes Level - In Thousands Not seasonally adjusted	0.675	180.34	103.24	3.72	14.92	4.79	8.26	1.22	3.00	3.85	-2.89	-3.19	-6.81	-65.18	-46.10	16.34	7.67	1.11	10.23	26.29	11.31	28.04	24.21	17.51	14.42	6.94	0.78	4.29	5.23	6.53	4.39	3.60	-2.15
AVERAGE HOURLY EARNINGS OF PRODUCTION AND NONSUPERVISORY EMPLOYEES, 1982-84 DOLLARS Education and health services Assisted living facilities for the elderly Seasonally Adjusted	0.640	4.86	7.01	7.68	5.61	4.61	4.44	4.95	3.61	4.10	3.43	3.26	3.90	0.48	-2.03	-2.48	-1.72	-1.10	0.31	0.79	1.74	0.79	1.90	1.42	0.16	0.95	3.39	-3.72	-0.65	2.25	1.93	-1.46	-0.32
PPI industry data for Home health care services-Medicaid patients, not seasonally adjusted	0.428	3.46	3.38	3.61	3.61	3.77	3.61	3.20	0.86	0.86	0.78	0.93	0.93	0.86	0.78	0.39	0.39	0.22	0.38	1.26	1.83	2.06	2.06	2.80	2.84	2.84	4.43	4.20	0.77	4.81	5.62	1.19	0.80
Average weekly hours of production and nonsupervisory employees, offices of chiropractors, seasonally adjusted	0.387	2.82	2.03	6.56	5.26	9.02	4.84	3.17	2.34	3.16	0.00	0.00	0.78	1.96	4.78	2.31	1.54	1.13	3.08	3.46	1.91	5.36	9.02	8.95	8.11	13.85	4.89	5.83	3.96	6.54	7.36	2.47	0.82
PPI industry data for Nursing care facilities-Private insurance and all other patients, not seasonally adjusted	0.386	4.24	5.47	5.26	5.17	4.37	4.45	3.90	3.10	3.02	2.35	0.83	0.95	0.41	-0.64	-0.71	-0.60	-0.94	-0.91	-0.55	-0.27	0.00	0.20	0.65	0.25	0.50	0.14	0.20	-2.96	0.67	2.49	2.35	1.82
Average Hourly Earnings Of Production And Nonsupervisory Employees, Home Health Care Services, Seasonally Adjusted	0.365	6.28	6.36	7.30	7.67	6.81	6.97	5.30	4.94	5.42	5.92	5.70	5.16	4.30	4.63	3.28	3.36	4.20	3.38	5.13	6.24	5.48	5.05	5.00	4.85	4.84	4.82	2.92	-1.31	4.98	2.50	-2.31	-2.48
AVERAGE WEEKLY EARNINGS OF ALL EMPLOYEES Education and health services Assisted living facilities for the elderly Seasonally Adjusted	0.314	4.66	10.97	12.04	10.19	9.02	10.16	11.22	9.31	10.02	8.94	8.68	8.40	8.35	1.97	2.13	3.97	3.99	5.05	3.58	5.71	6.54	7.54	8.67	9.30	8.55	6.78	4.70	0.98	2.55	5.06	-1.71	2.51
Indexes Of Aggregate Weekly Payrolls Of All Employees, 2007=100, Psychiatric And Substance Abuse Hospitals, Seasonally Adjusted	0.215	10.94	3.83	4.35	11.59	7.04	6.26	-0.24	1.33	0.09	-1.42	-1.24	-2.36	-1.11	4.51	4.41	-0.59	0.23	0.41	1.77	3.80	6.48	7.35	6.63	7.64	8.85	3.88	5.70	3.11	6.67	3.96	0.08	-2.71
PPI industry data for Surgical and medical instrument mfg-Primary products, not seasonally adjusted	0.198	1.54	1.05	1.12	0.98	0.70	1.33	0.98	0.84	0.70	0.84	-0.69	-0.83	-1.79	-0.48	0.07	0.21	0.34	0.04	-0.13	-0.15	0.10	0.33	1.92	2.39	2.40	-1.14	5.17	3.82	3.34	6.38	7.52	3.04
Average Hourly Earnings Of All Employees, 1982-1984 Dollars, Medical Laboratories, Seasonally Adjusted	0.147	-0.83	2.69	3.31	1.43	-0.67	0.25	0.68	0.84	2.31	2.04	-0.84	-0.34	-1.59	-3.76	-3.70	-5.40	-0.34	-1.26	-2.02	0.33	0.75	0.58	0.76	0.25	-0.94	6.22	3.34	3.56	5.87	4.37	-1.85	-1.50
Average Hourly Earnings Of Production And Nonsupervisory Employees, 1982-84 Dollars, Medical Laboratories, Seasonally Adjusted	-0.023	-0.10	2.84	1.96	1.46	-0.19	0.29	-0.10	-0.29	0.00	0.59	0.10	-0.49	-1.17	-3.52	-1.83	-1.73	0.49	0.29	-2.44	1.07	-0.20	-0.58	-0.87	3.15	0.99	4.69	0.20	3.66	5.10	9.95	5.26	4.85
Women Employees, Thousands, Medical Laboratories, Seasonally Adjusted	-0.249	8.14	1.79	1.11	0.51	4.83	5.18	7.14	7.04	6.17	7.95	8.69	10.10	10.45	17.57	16.05	16.84	9.29	9.78	7.61	6.44	6.54	4.82	3.48	2.42	1.26	3.45	-2.11	4.16	6.29	9.42	5.97	3.13
PPI industry data for Home health care services-Private insurance and all other patients, not seasonally adjusted	-0.275	1.73	1.66	1.81	2.03	2.03	2.03	2.49	2.49	2.49	2.49	2.55	1.93	2.59	2.66	3.03	2.81	2.96	2.96	2.50	2.50	2.50	2.80	2.51	2.29	1.98	7.24	5.55	-0.52	1.77	5.84	-1.40	4.07
Average weekly hours of production and nonsupervisory employees, offices of optometrists, seasonally adjusted	-0.277	2.52	-18.75	-5.28	5.35	7.21	5.99	5.97	4.69	5.28	7.86	4.32	1.55	4.92	26.54	7.87	-0.60	-5.26	-2.68	-3.26	-3.58	-5.90	-7.58	-6.80	-2.45	-5.87	5.65	2.34	11.31	8.84	5.82	0.17	-3.03
AVERAGE WEEKLY EARNINGS OF PRODUCTION AND NONSUPERVISORY EMPLOYEES Education and health services Offices of optometrists Seasonally Adjusted	-0.298	6.49	-17.09	-4.81	5.66	10.68	5.58	5.41	5.34	4.93	7.10	1.00	1.17	4.77	33.59	13.59	3.92	-6.28	2.67	1.98	0.93	-3.33	-4.49	-5.63	0.21	-2.35	8.26	3.02	8.93	7.95	6.50	-1.76	-1.45
Average Weekly Earnings Of Production And Nonsupervisory Employees, 1982-84 Dollars, General Medical And Surgical Hospitals, Seasonally Adjusted	-0.338	0.88	-1.41	0.30	0.98	0.01	0.05	0.52	1.01	2.83	6.00	3.24	2.05	0.68	4.78	3.40	1.70	2.90	4.09	5.48	2.50	1.22	-1.04	0.81	1.43	0.99	5.40	3.35	-2.21	6.47	4.62	-0.78	-1.85
Average Weekly Earnings Of Production And Nonsupervisory Employees, 1982-84 Dollars, Medical Laboratories, Seasonally Adjusted	-0.391	-0.88	-4.44	-2.88	-2.09	0.82	-1.78	0.13	0.00	-0.02	1.64	0.89	-1.29	-1.15	4.17	2.80	2.31	-0.28	0.57	-5.75	-2.61	-2.30	-6.03	-6.08	-4.27	-3.01	6.08	-1.44	9.25	11.01	8.51	2.43	-2.50
Aggregate Weekly Hours Of All Employees, Thousands, Offices Of Mental Health Physicians, Seasonally Adjusted	-0.399	-3.11	-10.19	-3.62	-0.06	7.22	1.65	7.73	10.81	13.36	17.09	17.01	17.18	17.27	32.75	26.75	20.04	8.39	18.81	22.25	16.51	11.18	10.17	9.67	9.92	10.22	2.58	0.26	1.88	3.91	5.83	3.25	1.92
AVERAGE WEEKLY EARNINGS OF ALL EMPLOYEES Education and health services Offices of optometrists Seasonally Adjusted	-0.426	1.29	-15.31	-4.38	1.84	1.11	-1.30	2.04	1.82	1.37	1.33	-4.22	-4.86	5.36	27.94	12.96	5.71	5.05	7.51	3.53	5.31	3.94	2.94	3.09	11.43	2.29	8.32	1.97	3.07	2.88	2.27	-6.05	-0.61
AVERAGE WEEKLY EARNINGS OF ALL EMPLOYEES, 1982-1984 DOLLARS Education and health services Offices of optometrists Seasonally Adjusted	-0.434	-0.24	-15.62	-4.61	1.11	0.08	-2.59	0.63	0.63	0.22	0.05	-5.51	-6.42	2.63	22.84	7.64	0.35	-0.21	2.19	-1.76	-0.87	-2.70	-3.88	-4.12	3.26	-5.77	8.76	2.97	5.25	6.22	5.39	-3.37	-0.83
Average Weekly Earnings Of Production And Nonsupervisory Employees, Medical Laboratories, Seasonally Adjusted	-0.454	0.54	-4.33	-2.86	-1.47	1.85	-0.39	1.67	1.28	1.21	3.02	2.42	0.64	1.86	9.04	8.53	8.50	5.60	6.38	-0.15	4.10	5.12	1.38	1.71	4.03	6.11	5.07	-5.14	2.16	2.42	2.45	-2.62	0.02
Production And Nonsupervisory Employees, Thousands, Medical Laboratories, Seasonally Adjusted	-0.483	4.00	-2.01	-3.41	-2.10	1.53	2.39	4.33	5.28	5.29	6.61	6.51	7.62	7.91	16.59	15.50	13.03	8.15	8.16	6.66	5.71	4.87	4.03	2.90	4.84	3.04	2.96	-2.47	2.92	4.99	6.41	3.44	1.41
All Employees, Thousands, Offices Of Mental Health Physicians, Seasonally Adjusted	-0.534	0.35	-7.23	-3.59	-1.37	-0.17	-2.20	-0.85	0.51	1.19	0.85	1.70	4.44	6.22	15.77	12.77	9.91	7.07	10.21	14.21	8.97	7.05	11.11	9.03	8.66	8.62	4.66	-1.92	-2.18	0.31	1.82	-2.84	1.51
Average Weekly Earnings Of Production And Nonsupervisory Employees, 1982-84 Dollars, Diagnostic Imaging Centers, Seasonally Adjusted	-0.545	-4.03	-13.84	-11.61	-0.04	8.28	0.83	1.69	0.39	2.41	9.57	12.64	11.33	11.74	28.25	22.03	9.94	-0.66	3.35	5.69	4.32	3.85	-3.37	-8.16	-6.72	-4.91	-0.43	-0.52	5.91	6.10	10.05	10.48	3.95

Health Care Inflation vs CPI

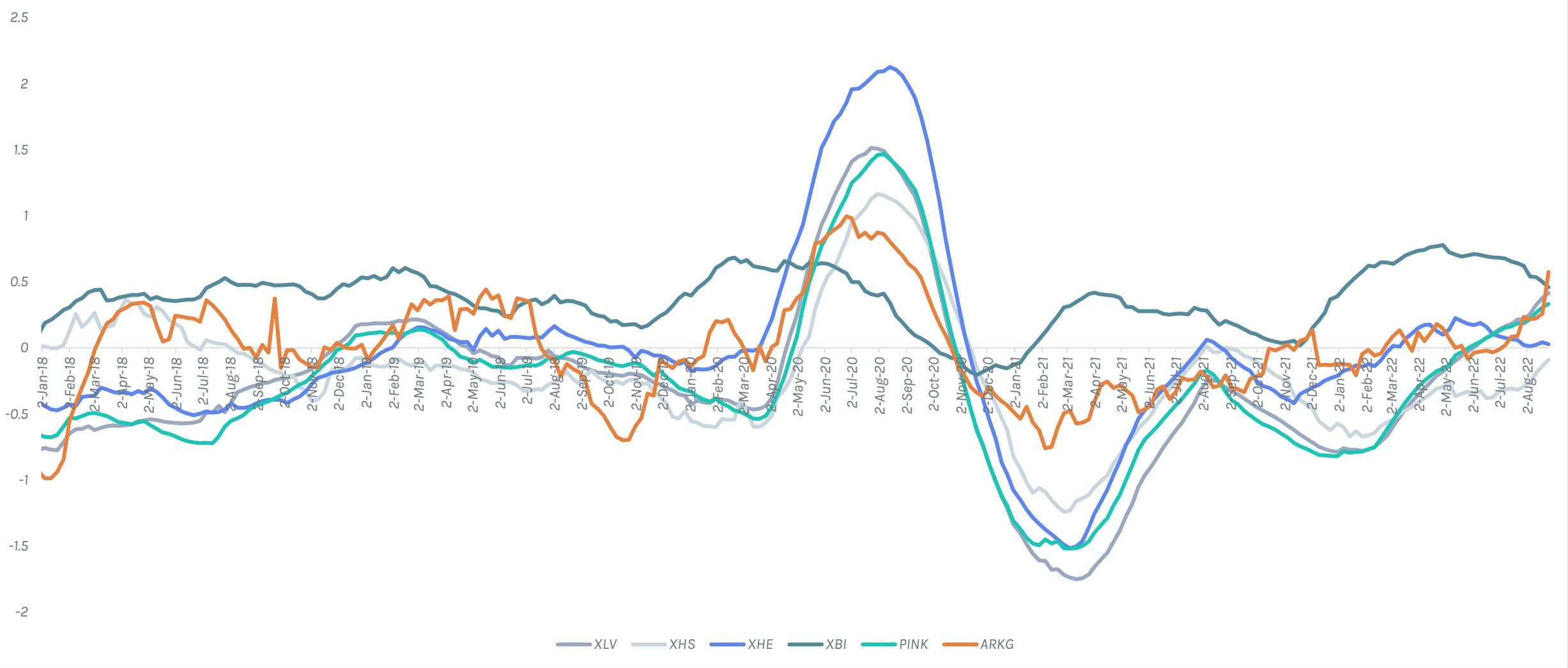
We are a year into widening spreads between CPI and largely fixed Health Care inflation



Index - Sales Slope

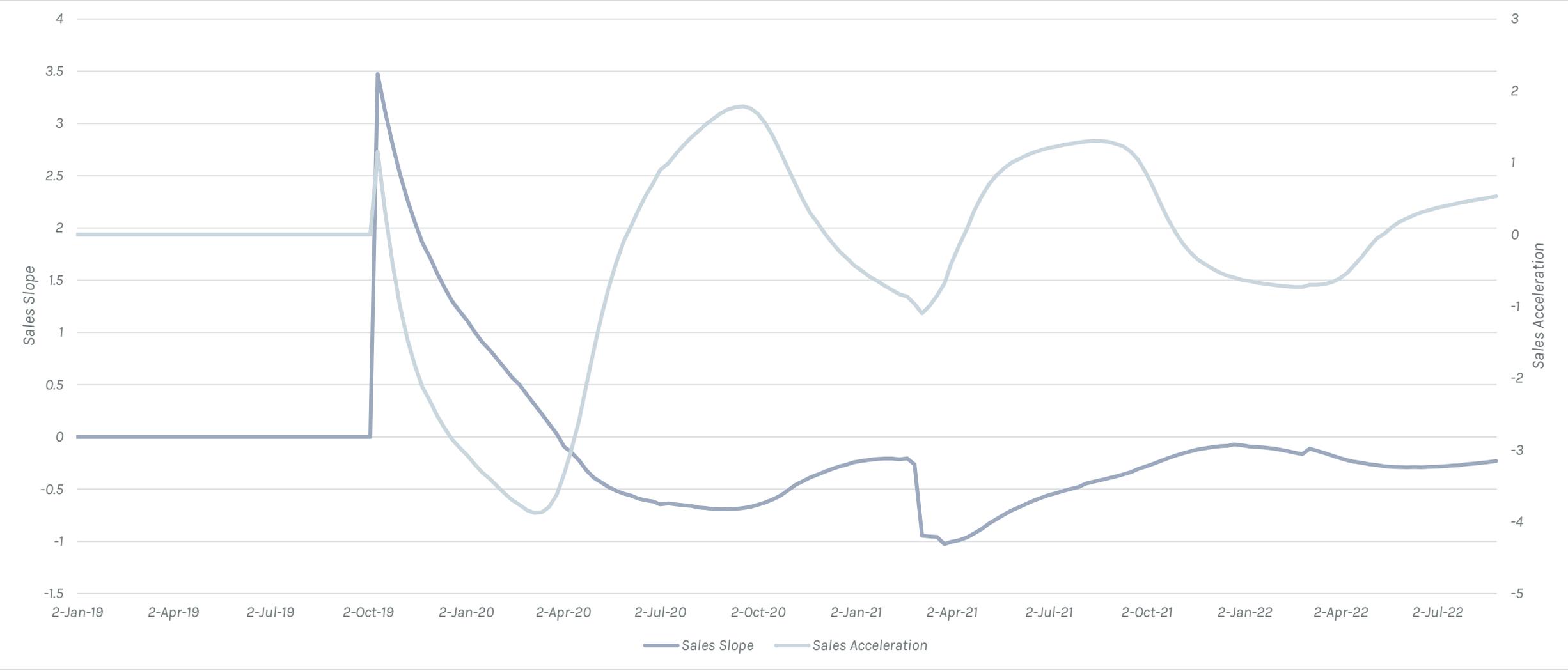


Index - Sales Acceleration



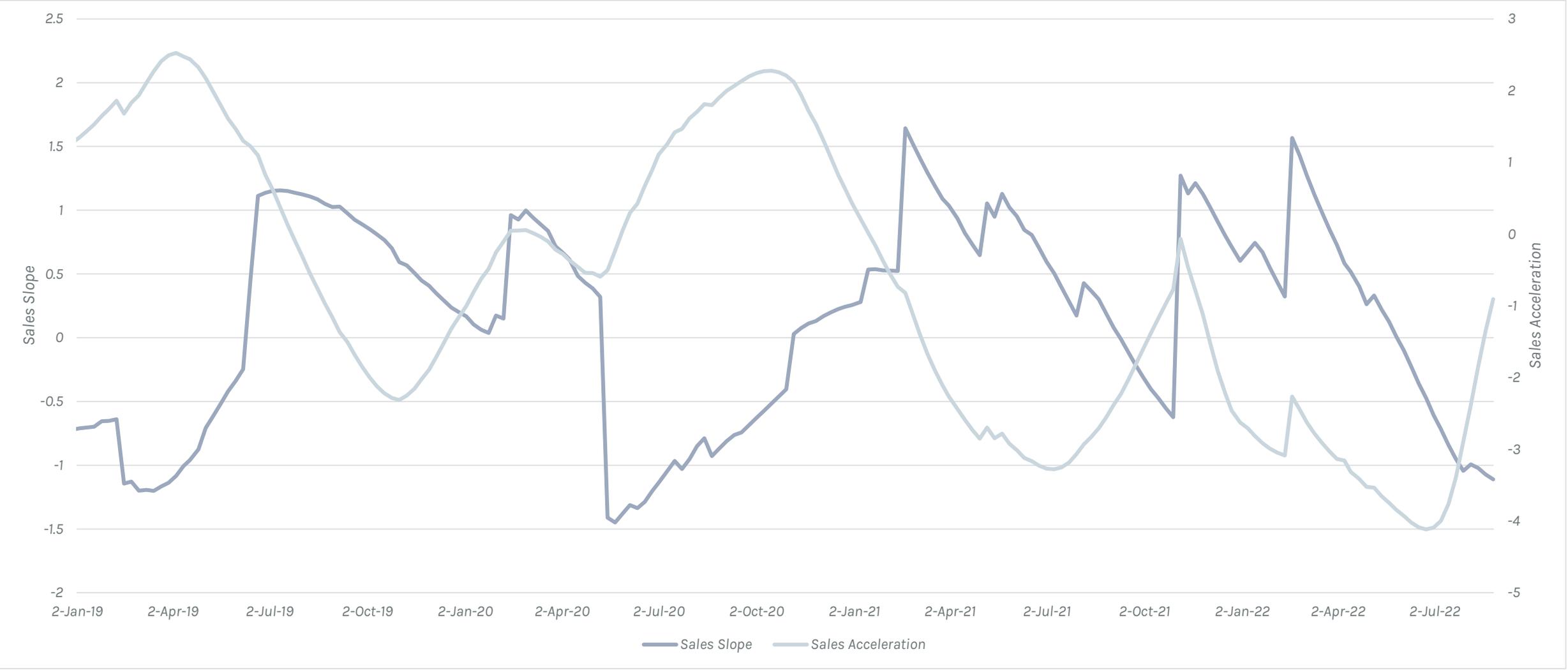
Sales Slope & Acceleration

ACHC



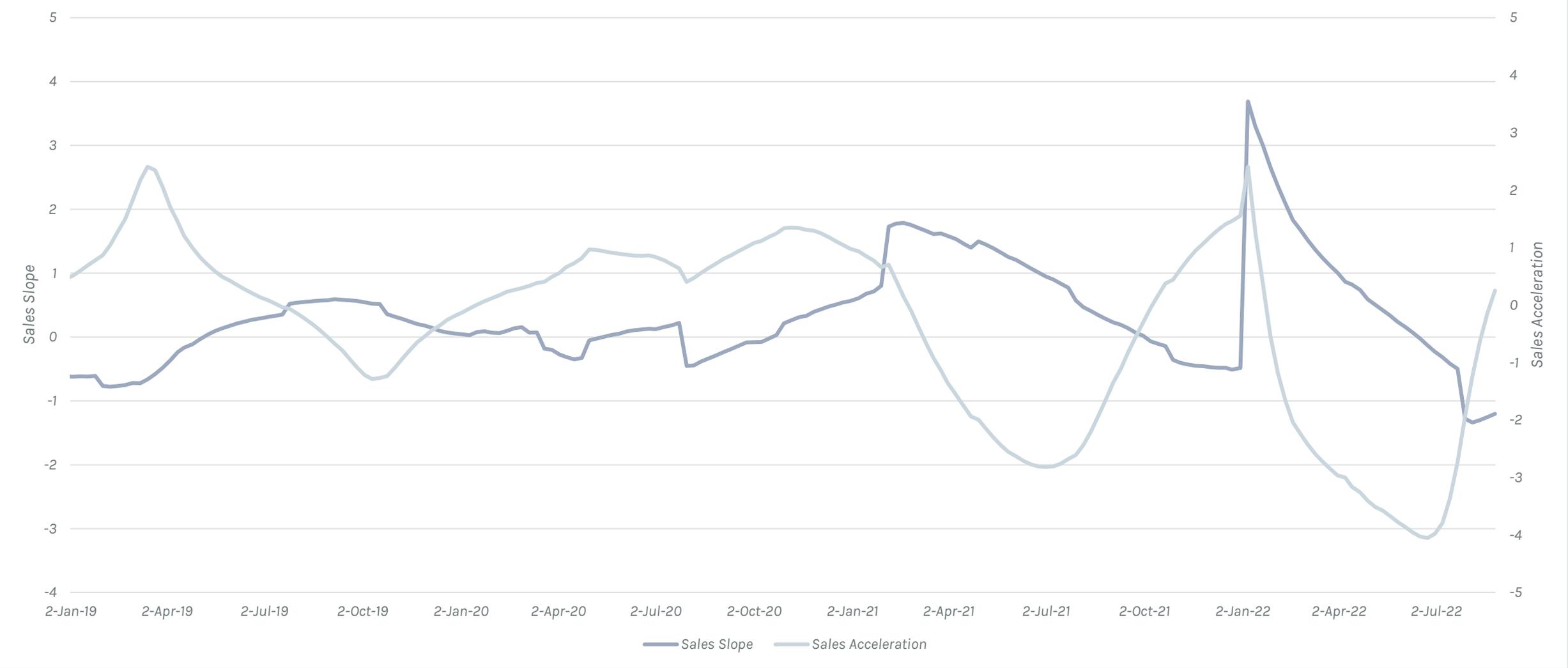
Sales Slope & Acceleration

AMN



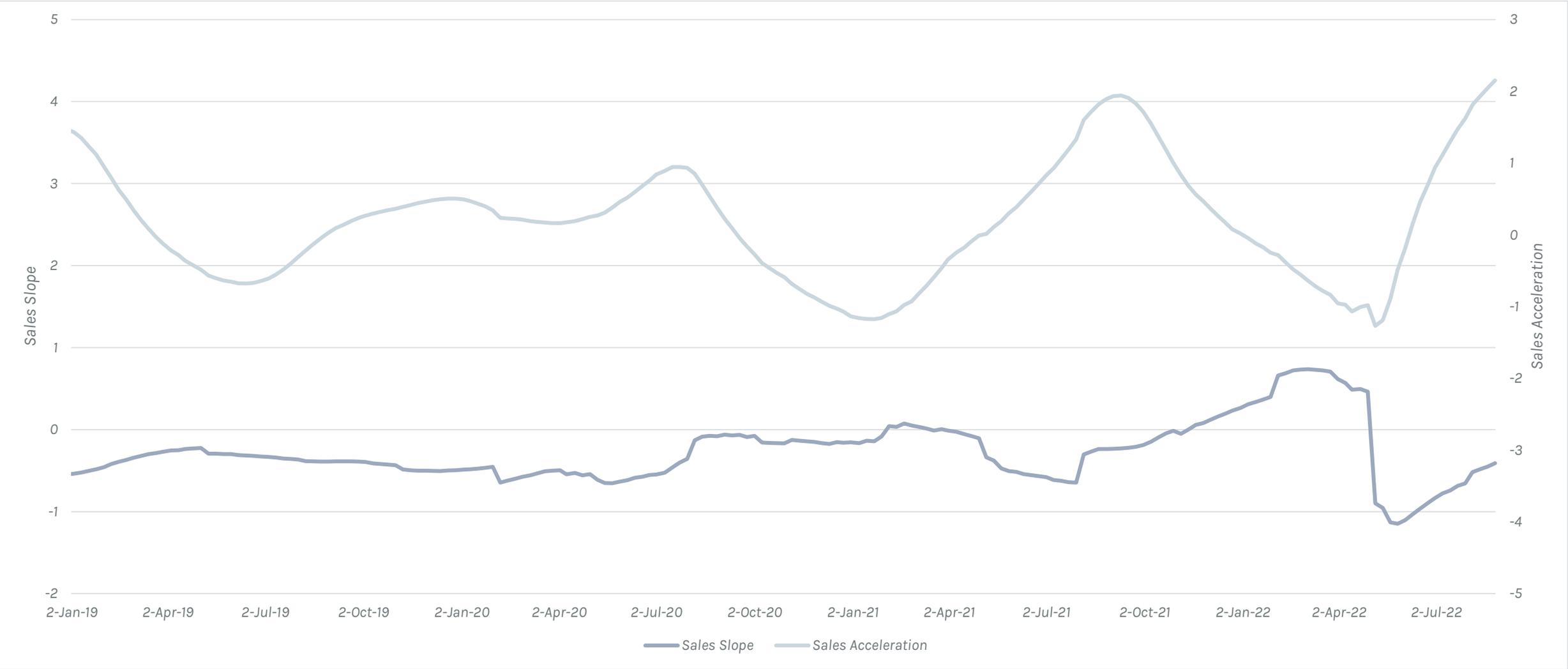
Sales Slope & Acceleration

BAX



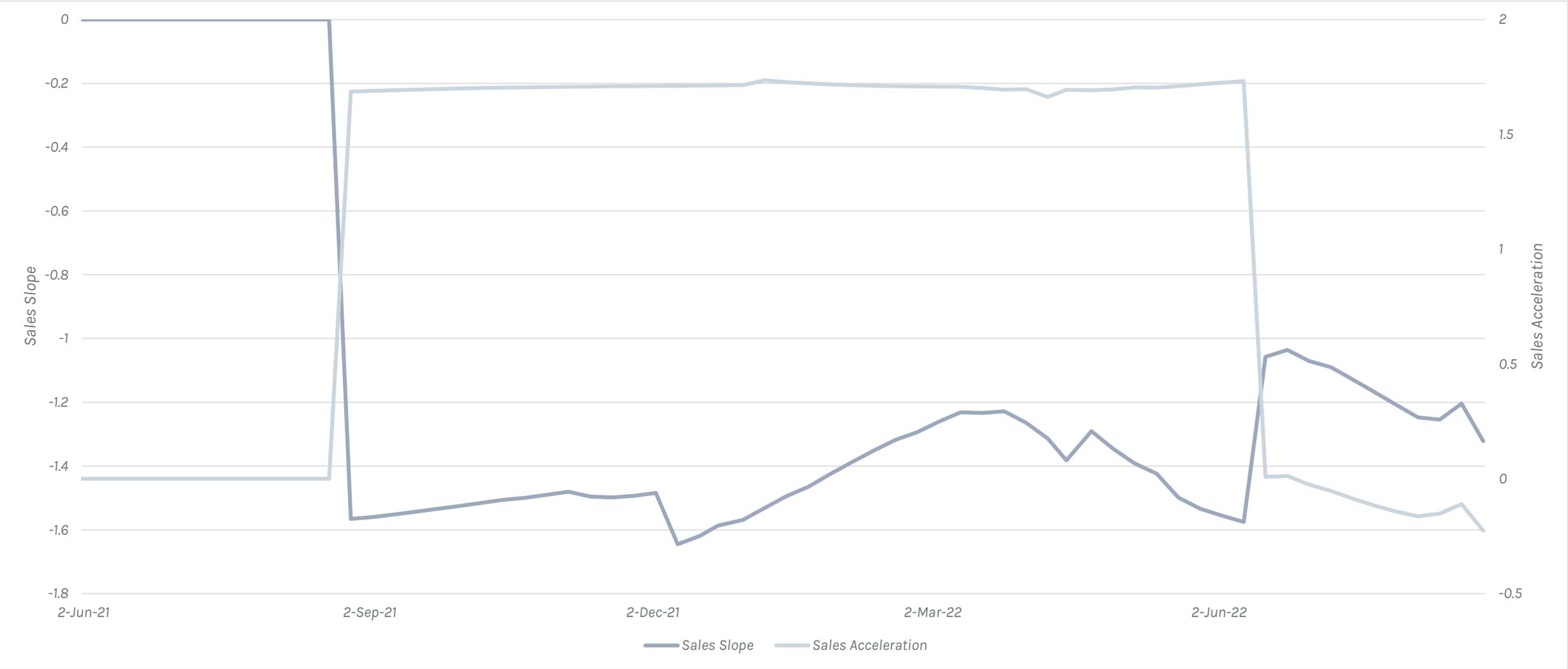
Sales Slope & Acceleration

BDX



Sales Slope & Acceleration

CANO



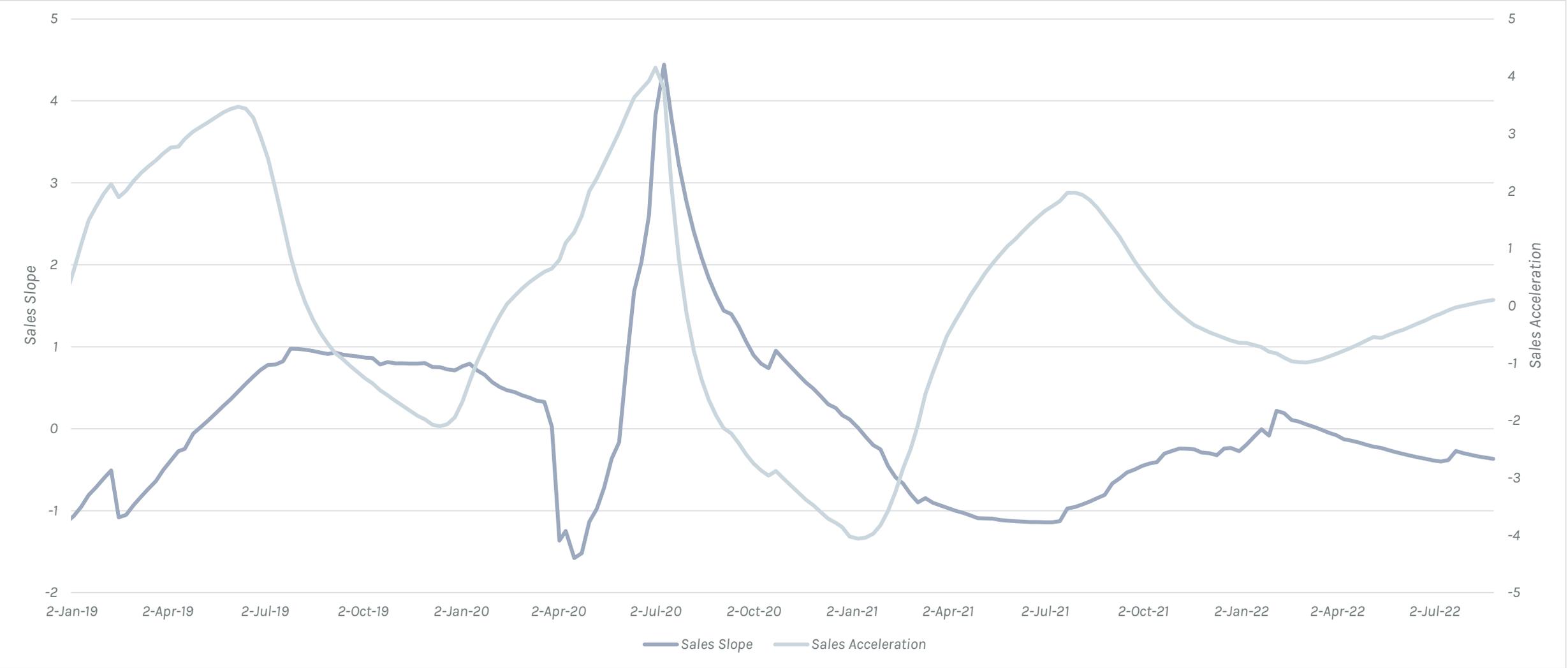
Sales Slope & Acceleration

CYH



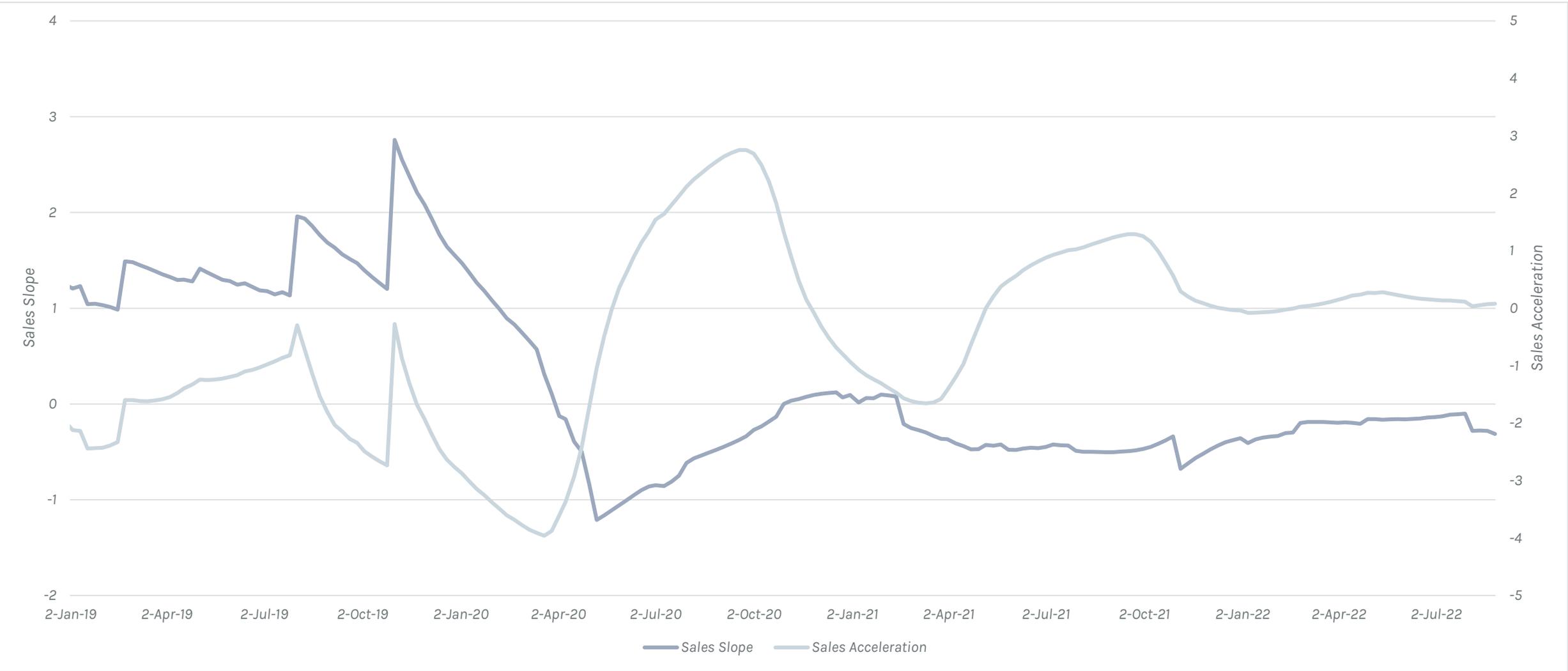
Sales Slope & Acceleration

DGX



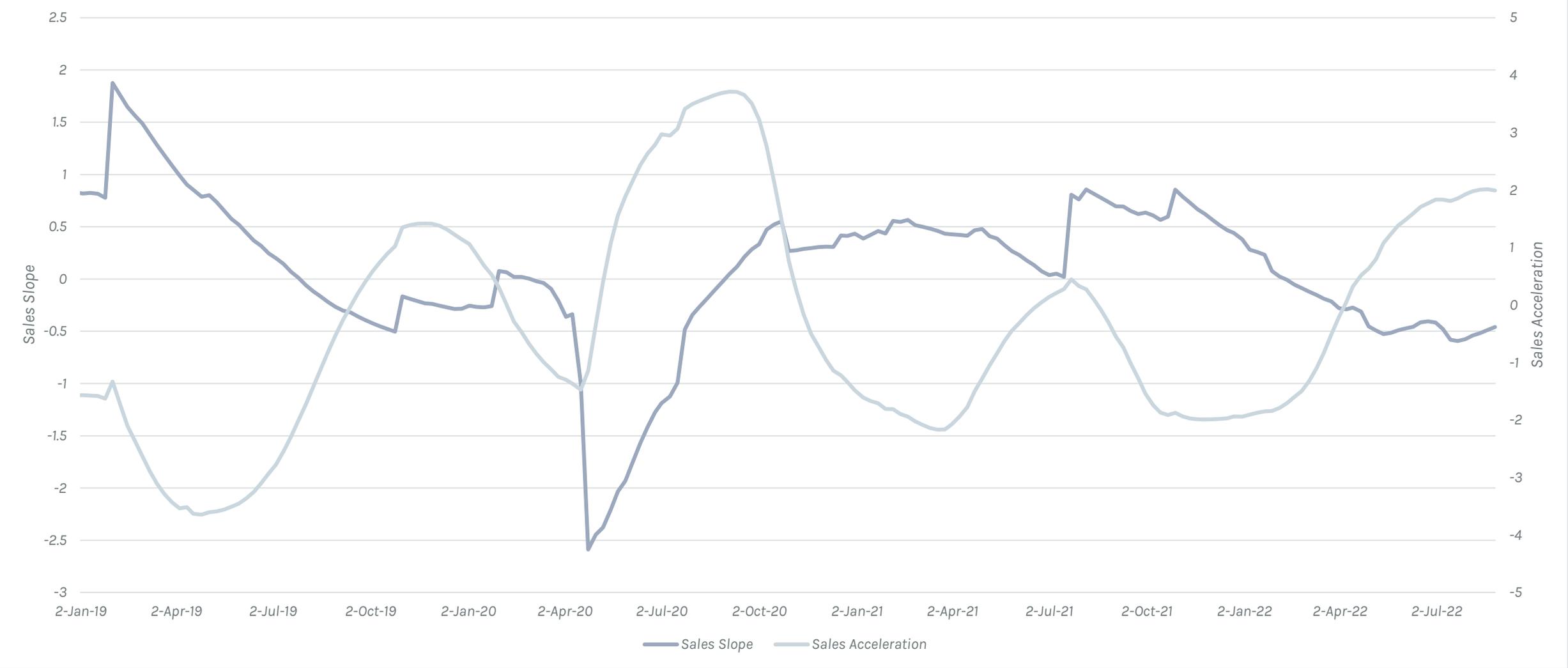
Sales Slope & Acceleration

EXAS



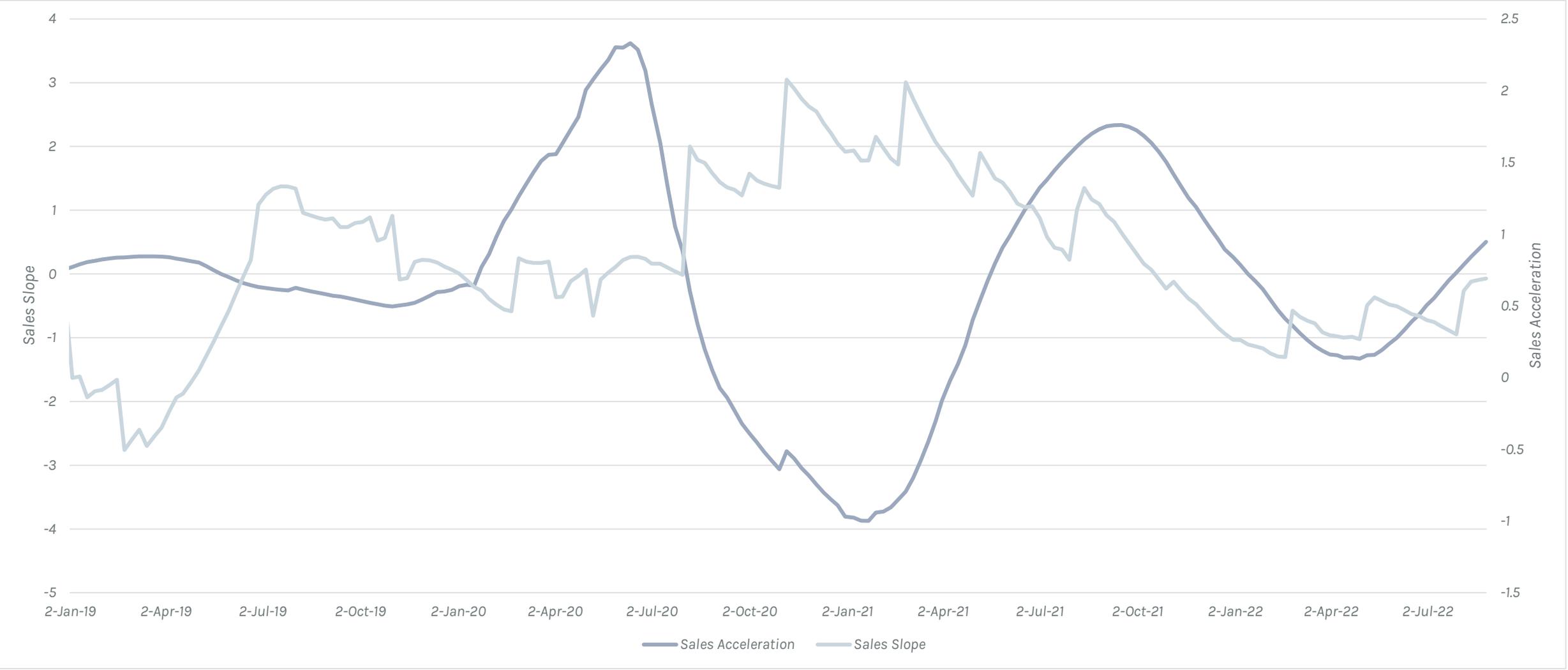
Sales Slope & Acceleration

HCA



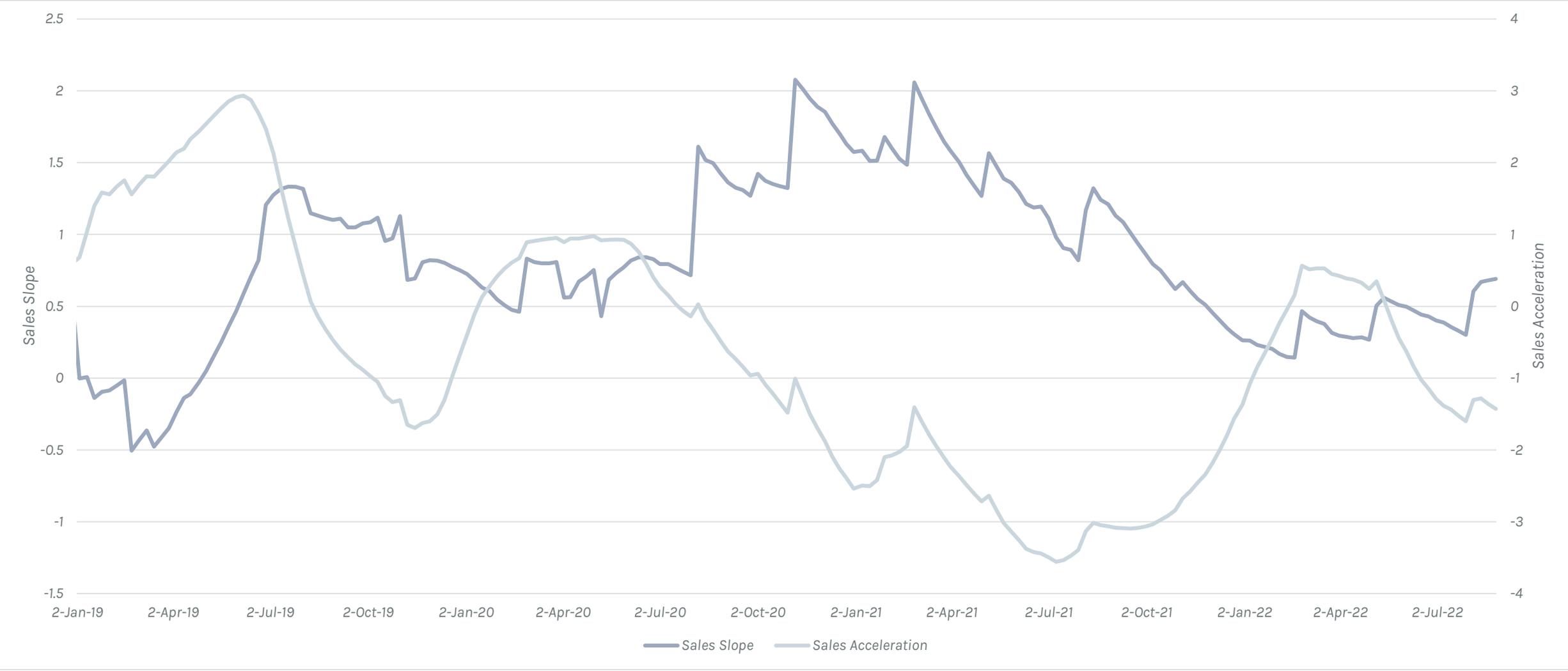
Sales Slope & Acceleration

HOLX



Sales Slope & Acceleration

NTRA



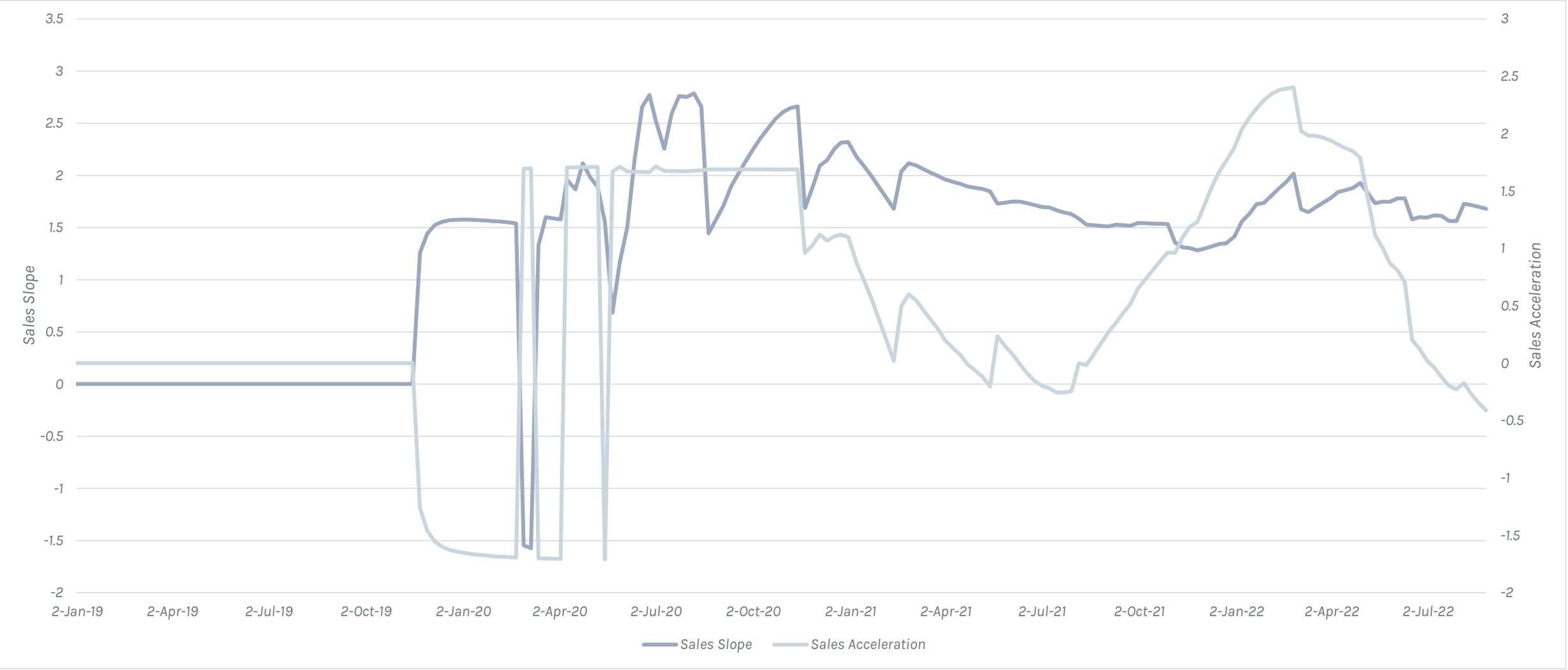
Sales Slope & Acceleration

ONEM



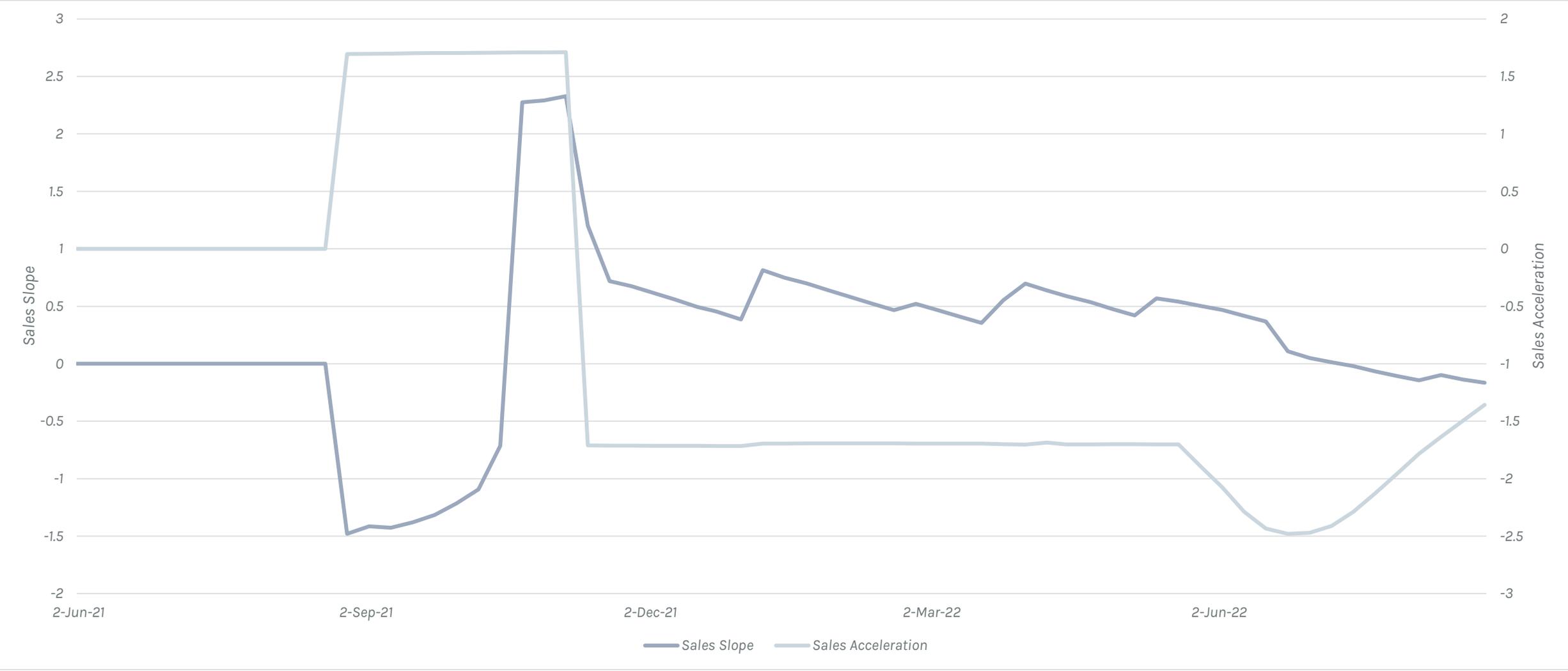
Sales Slope & Acceleration

PGNY



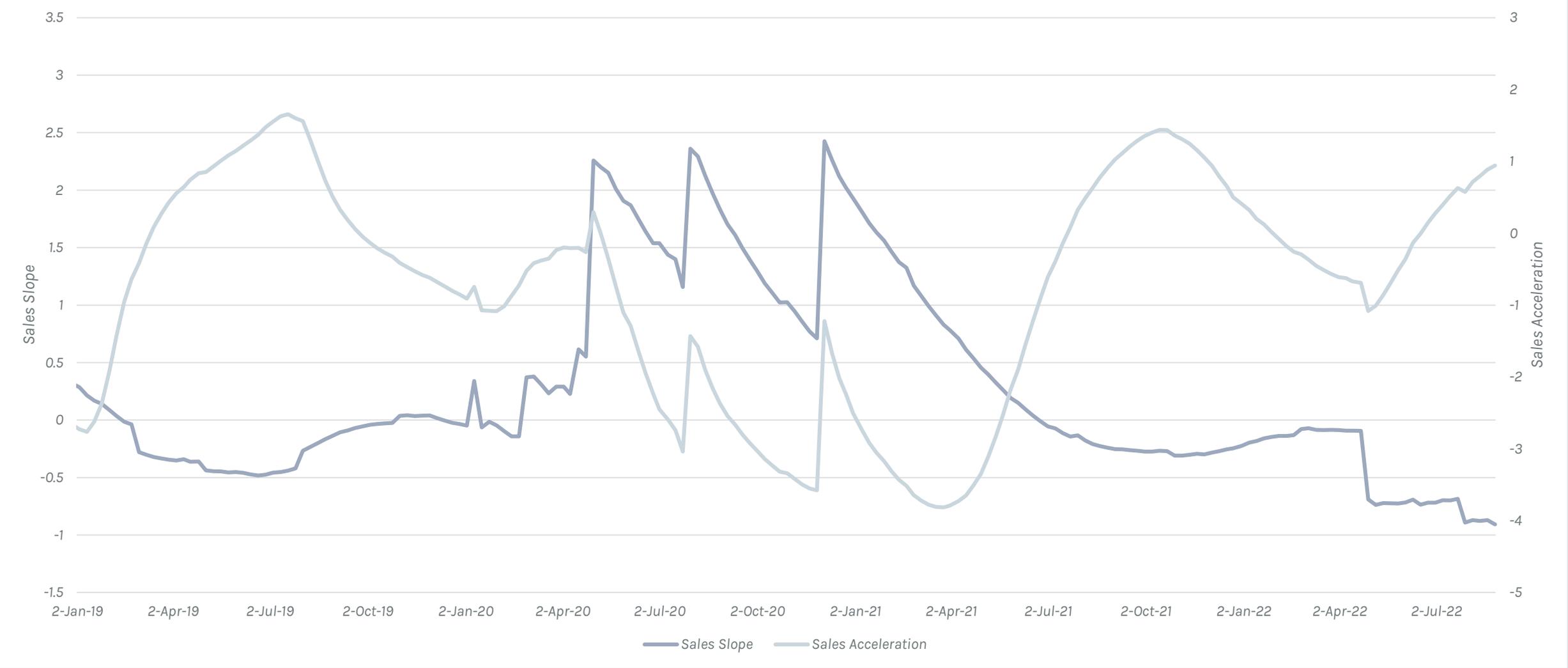
Sales Slope & Acceleration

PRVA



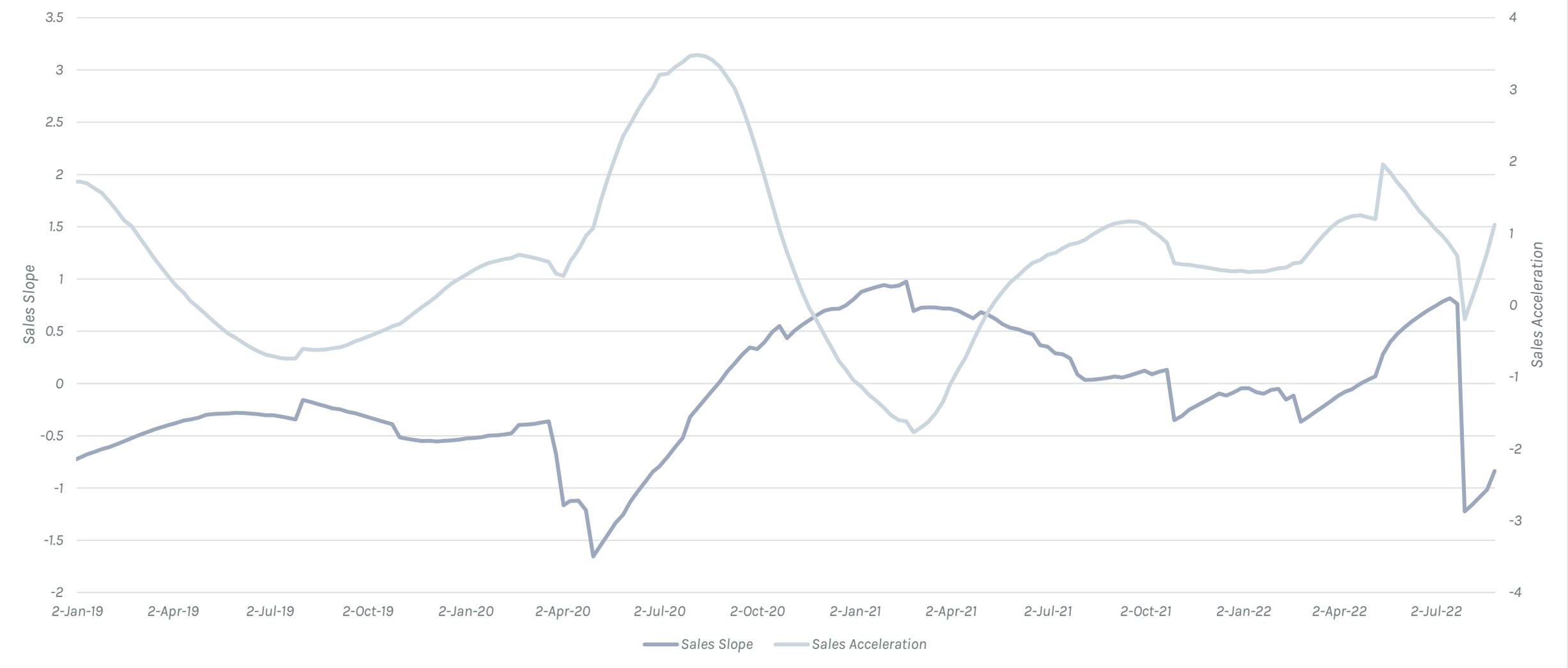
Sales Slope & Acceleration

TDOC



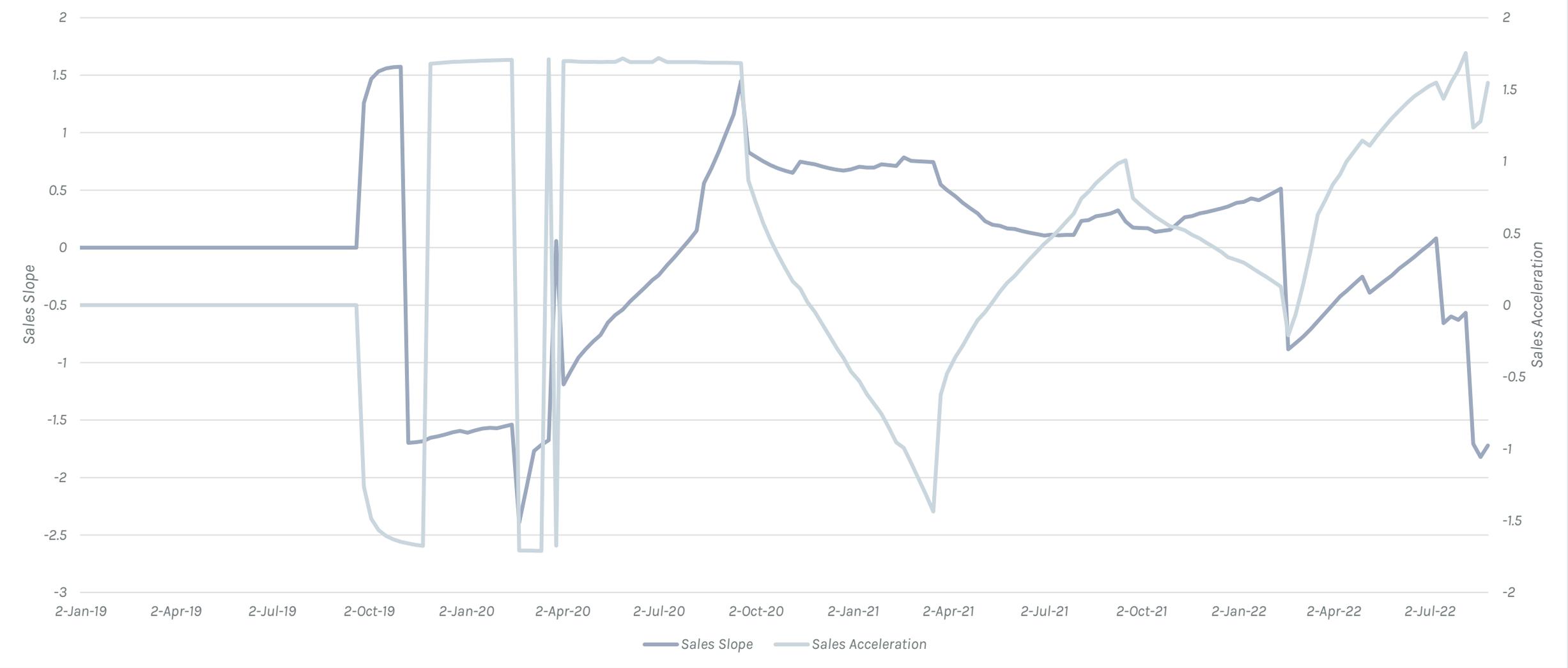
Sales Slope & Acceleration

TFX



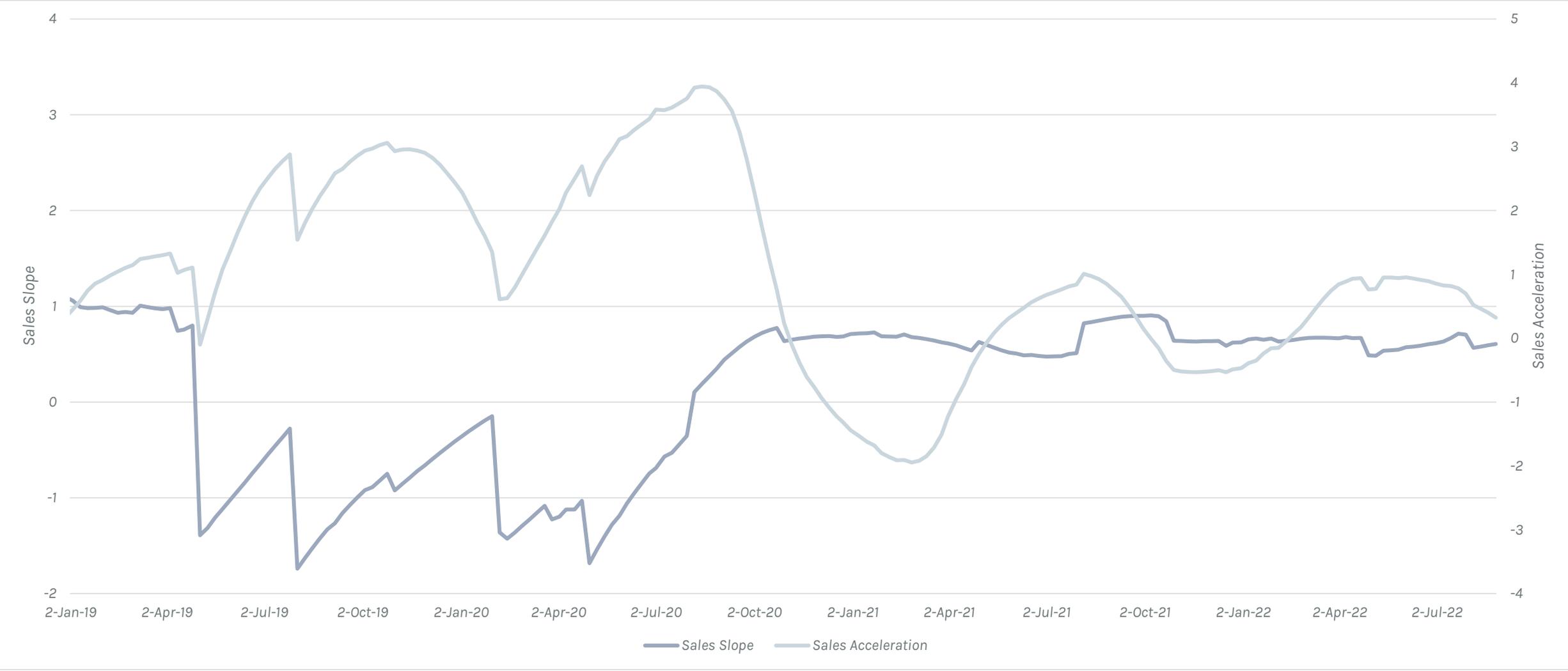
Sales Slope & Acceleration

TXG



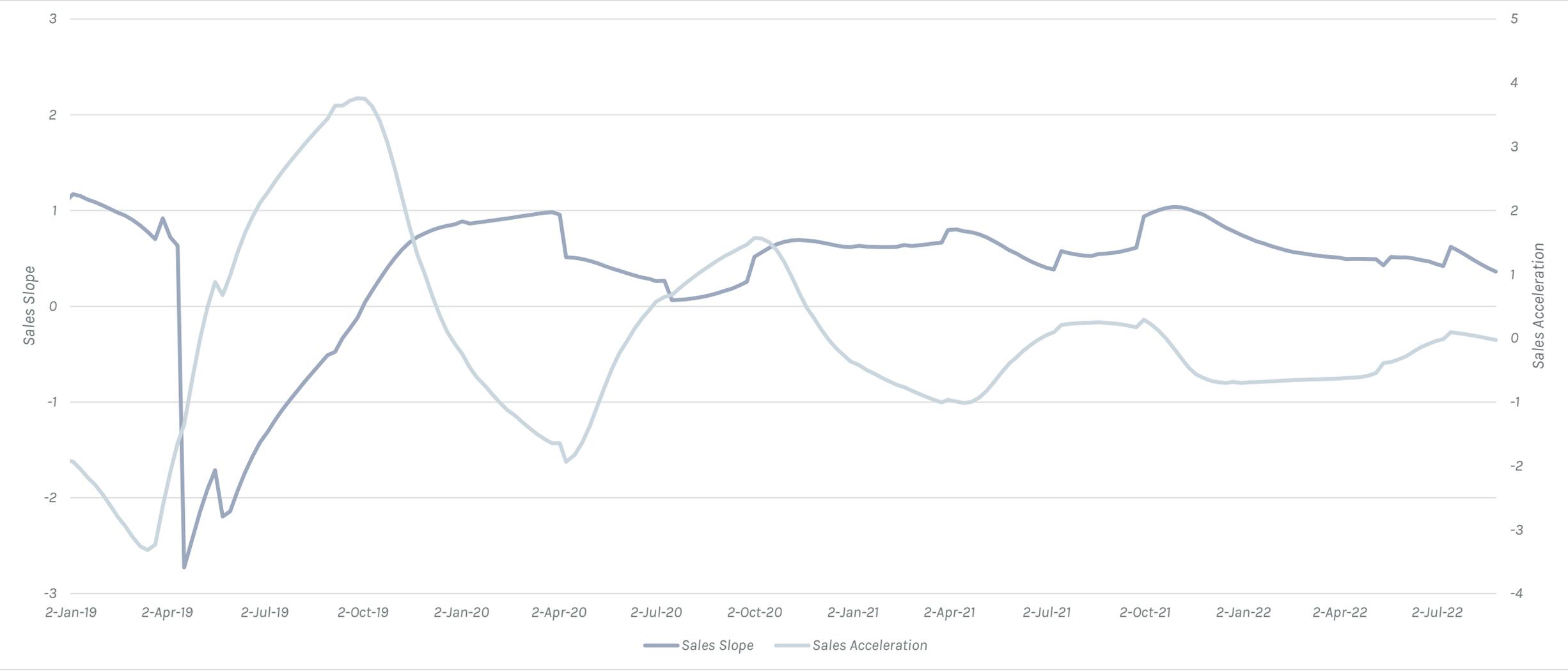
Sales Slope & Acceleration

ABMD



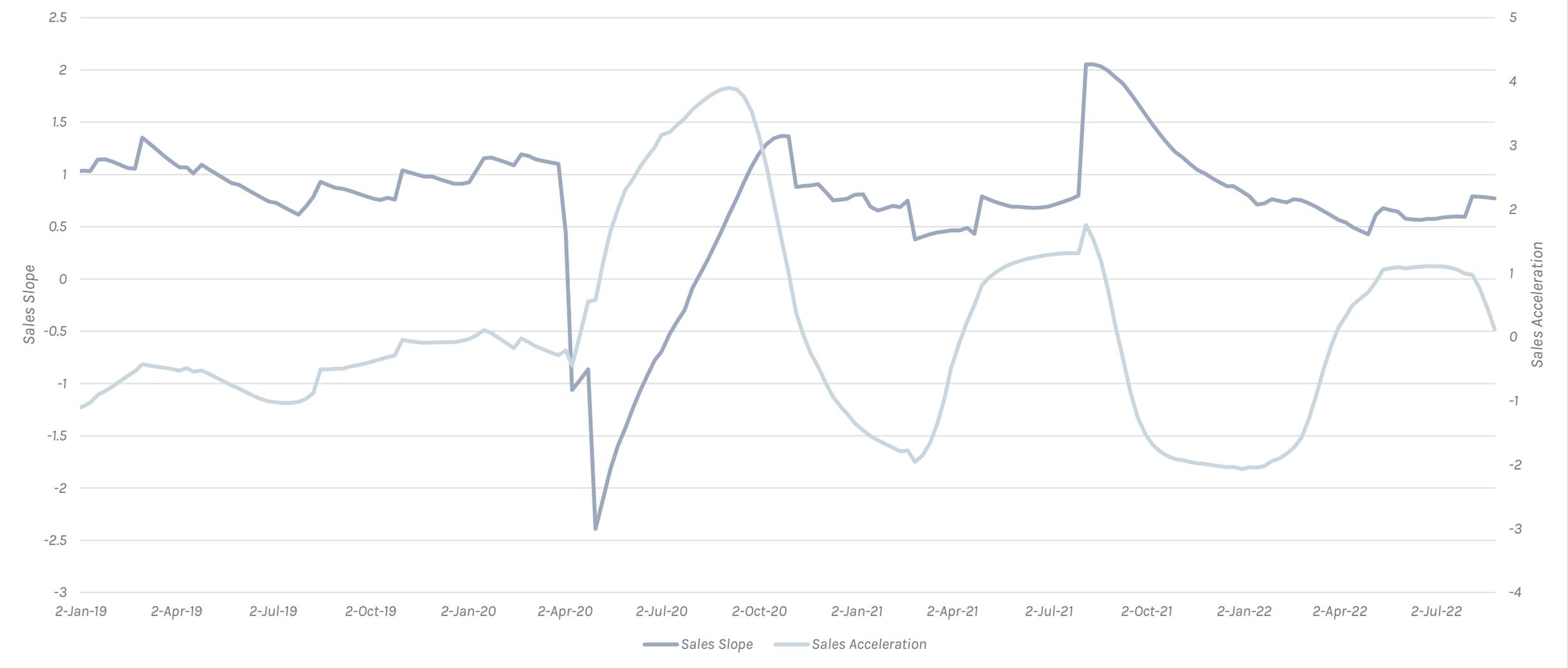
Sales Slope & Acceleration

ANGO



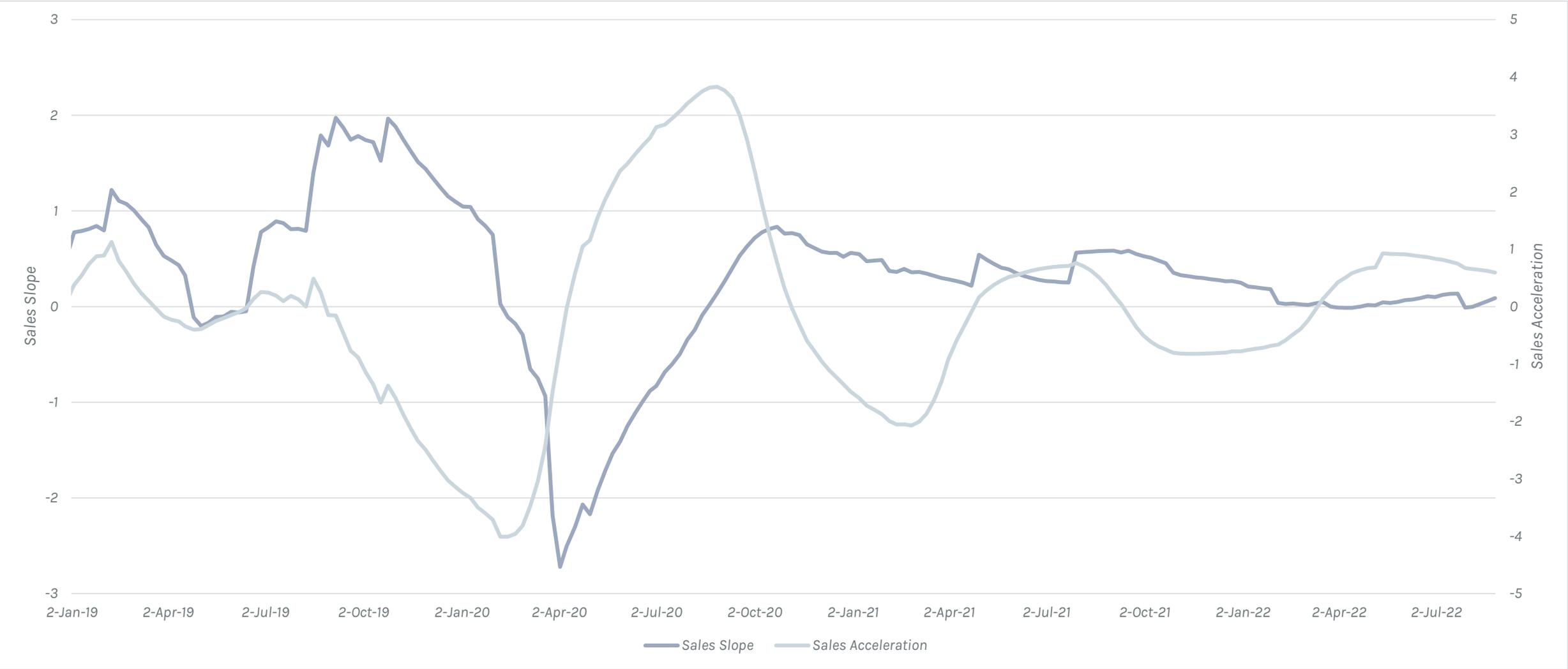
Sales Slope & Acceleration

ATRC



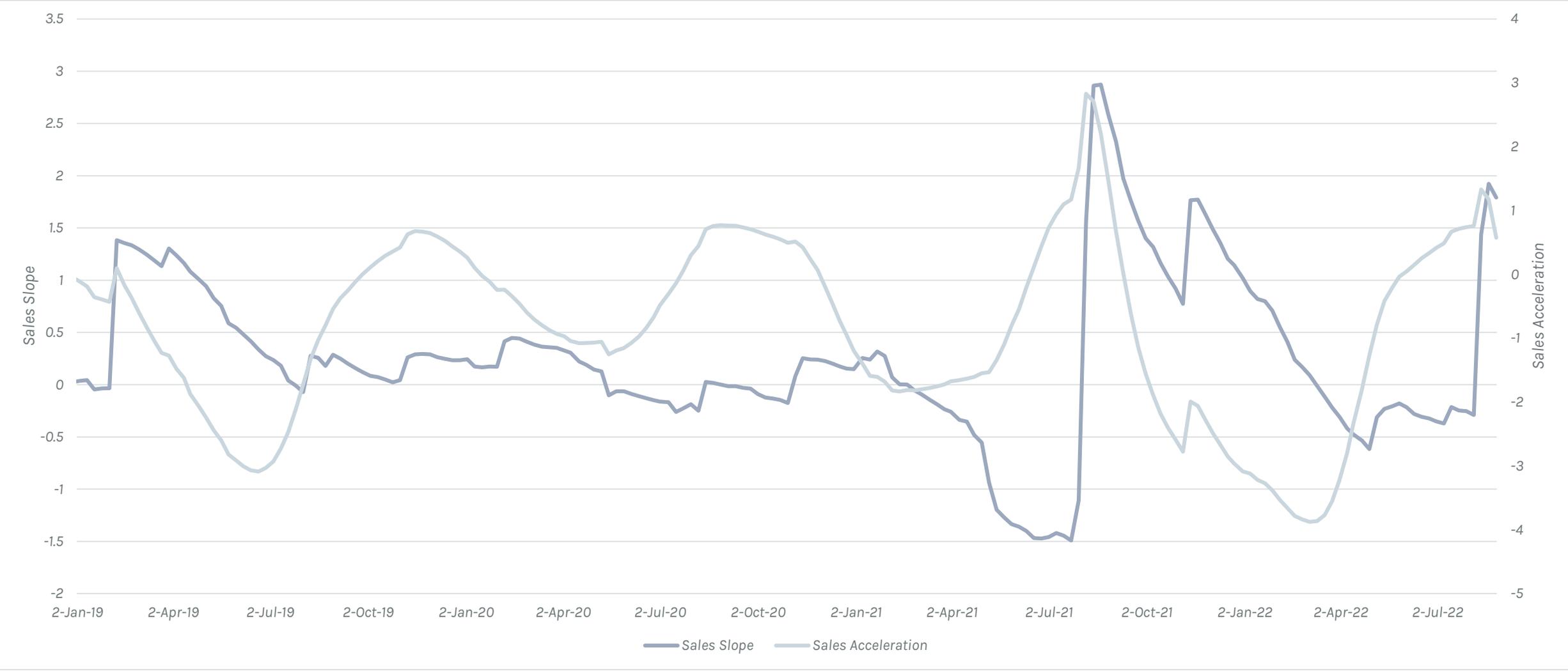
Sales Slope & Acceleration

BSX



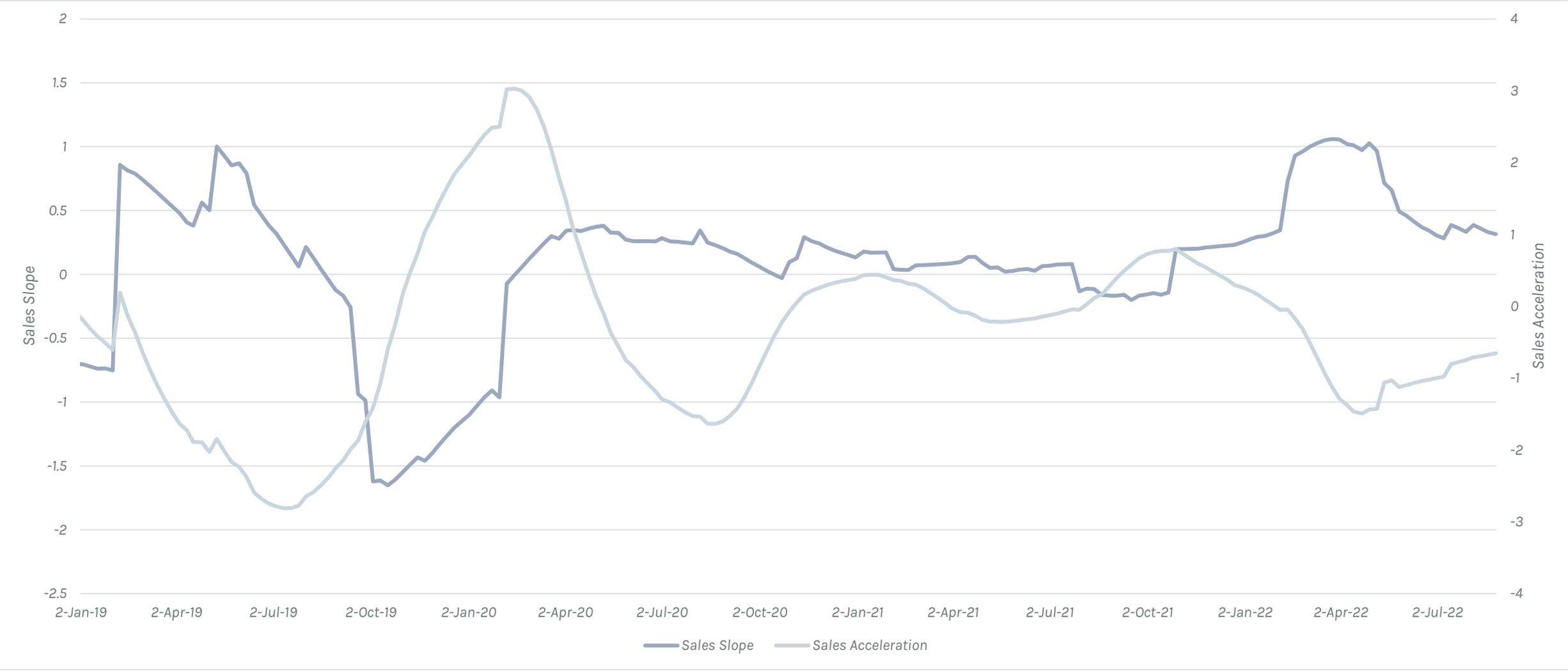
Sales Slope & Acceleration

CAH



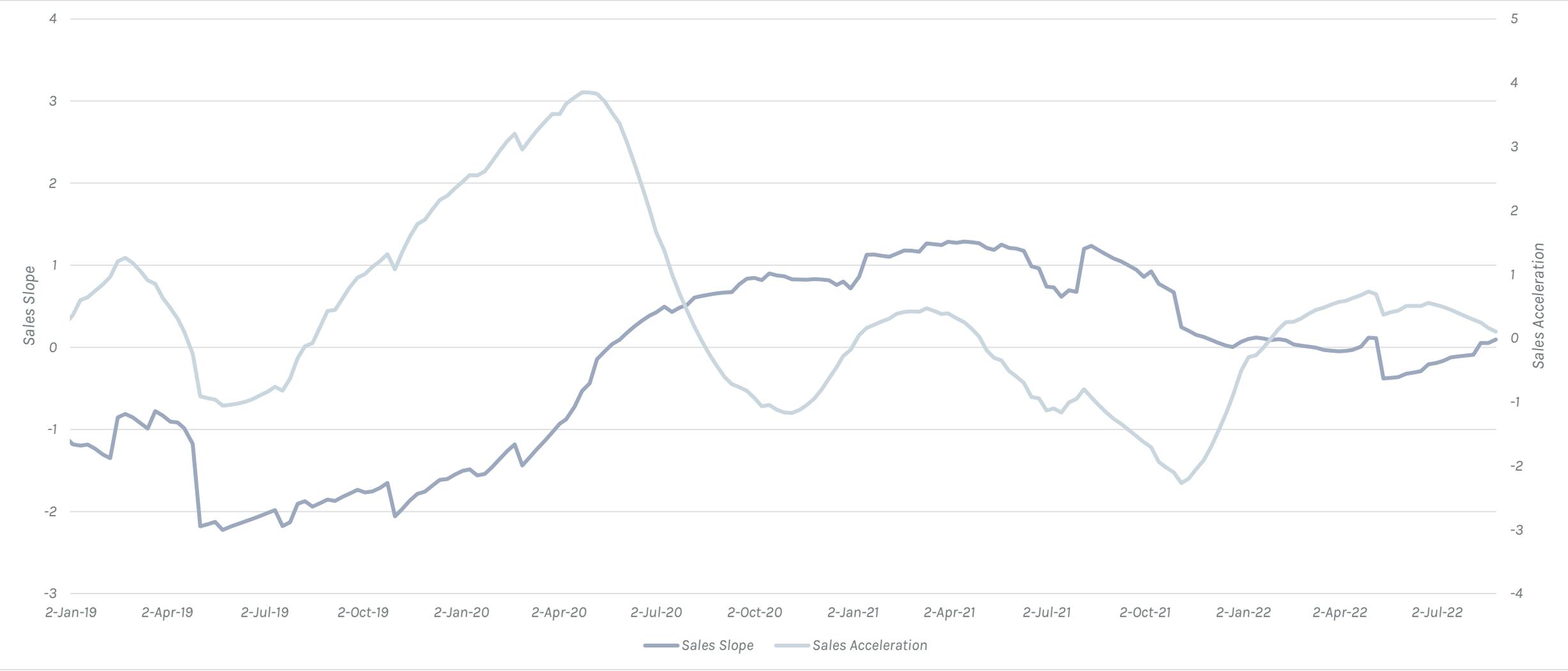
Sales Slope & Acceleration

ENSG



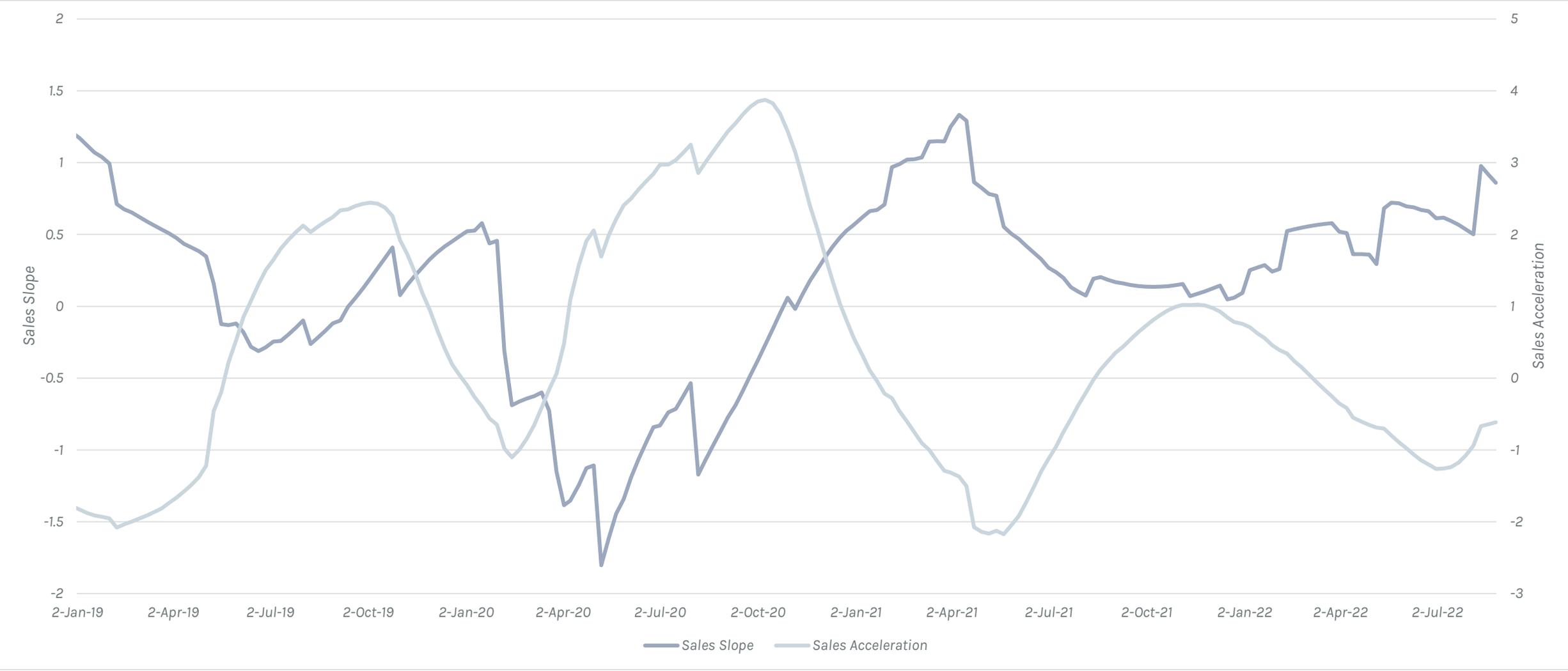
Sales Slope & Acceleration

EXEL



Sales Slope & Acceleration

HAE



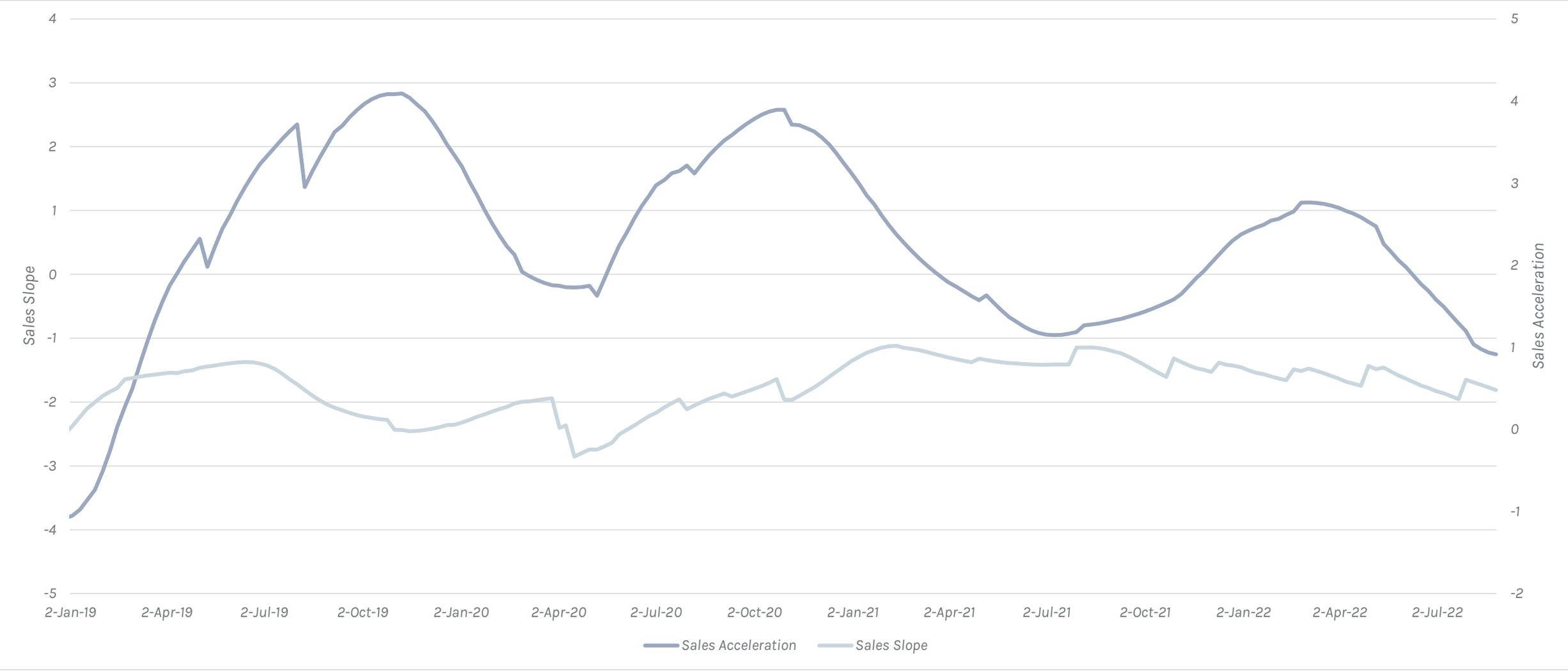
Sales Slope & Acceleration

INCY



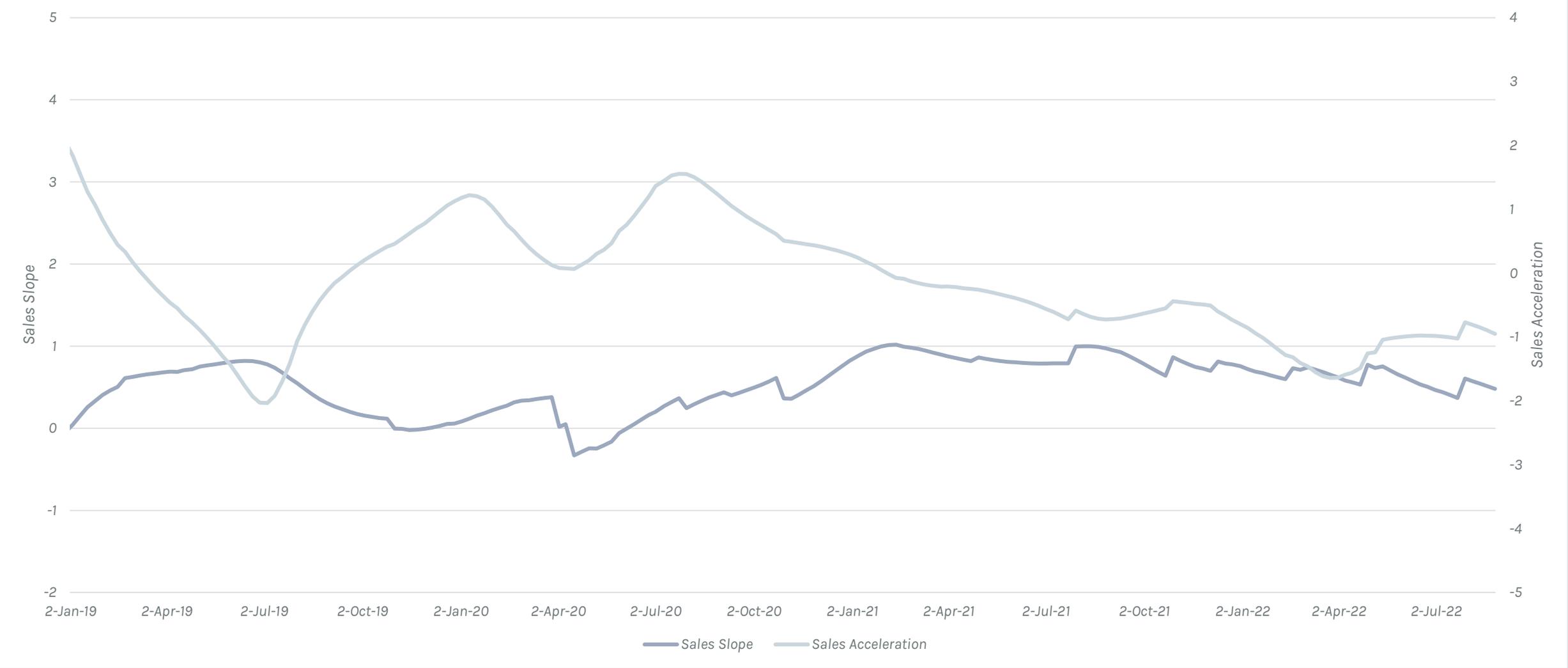
Sales Slope & Acceleration

INGN



Sales Slope & Acceleration

ITGR



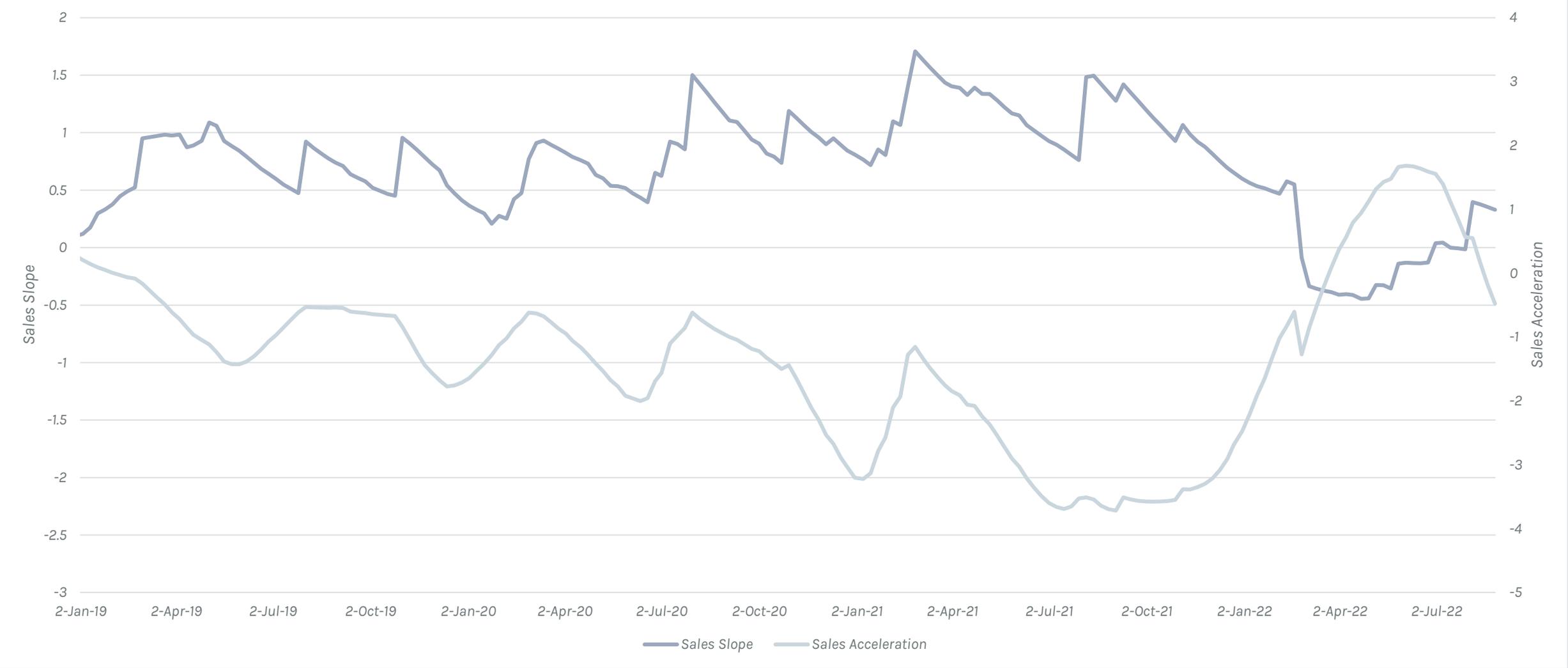
Sales Slope & Acceleration

LIVN



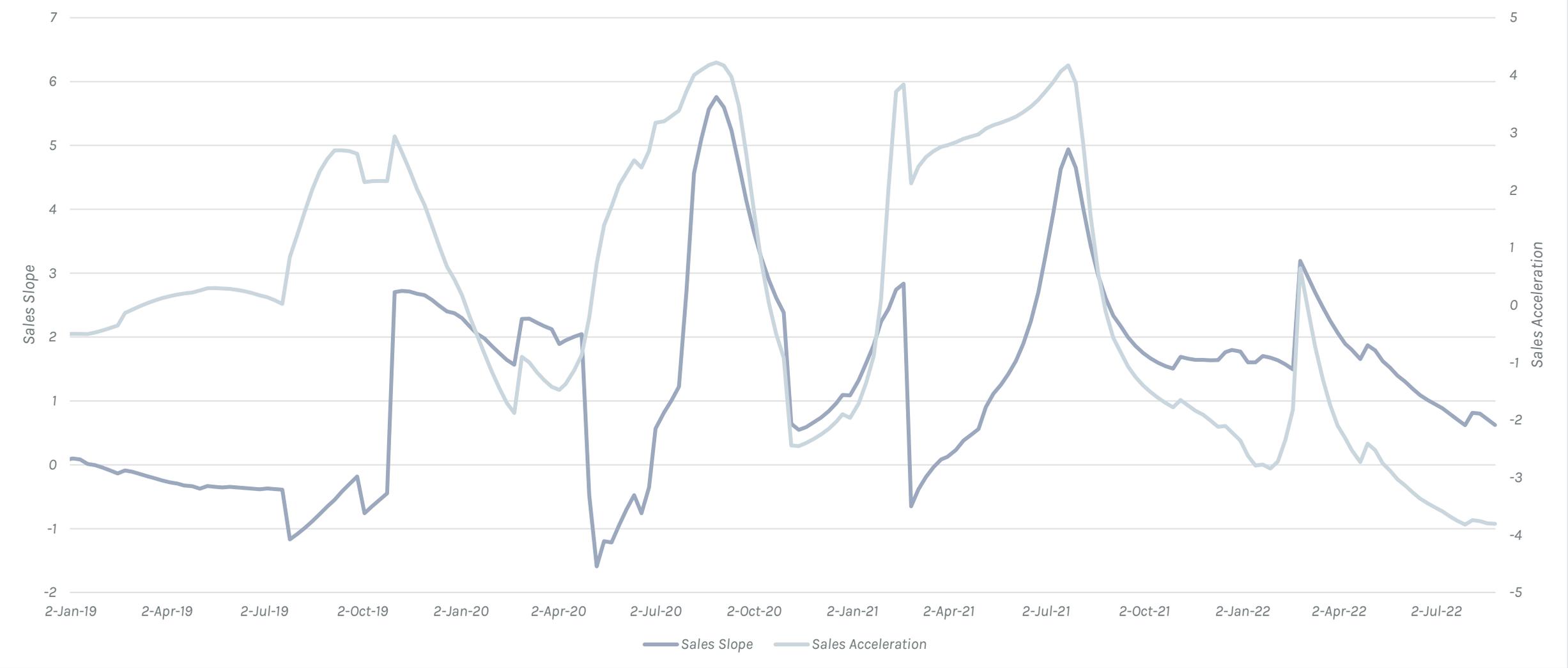
Sales Slope & Acceleration

UTHR



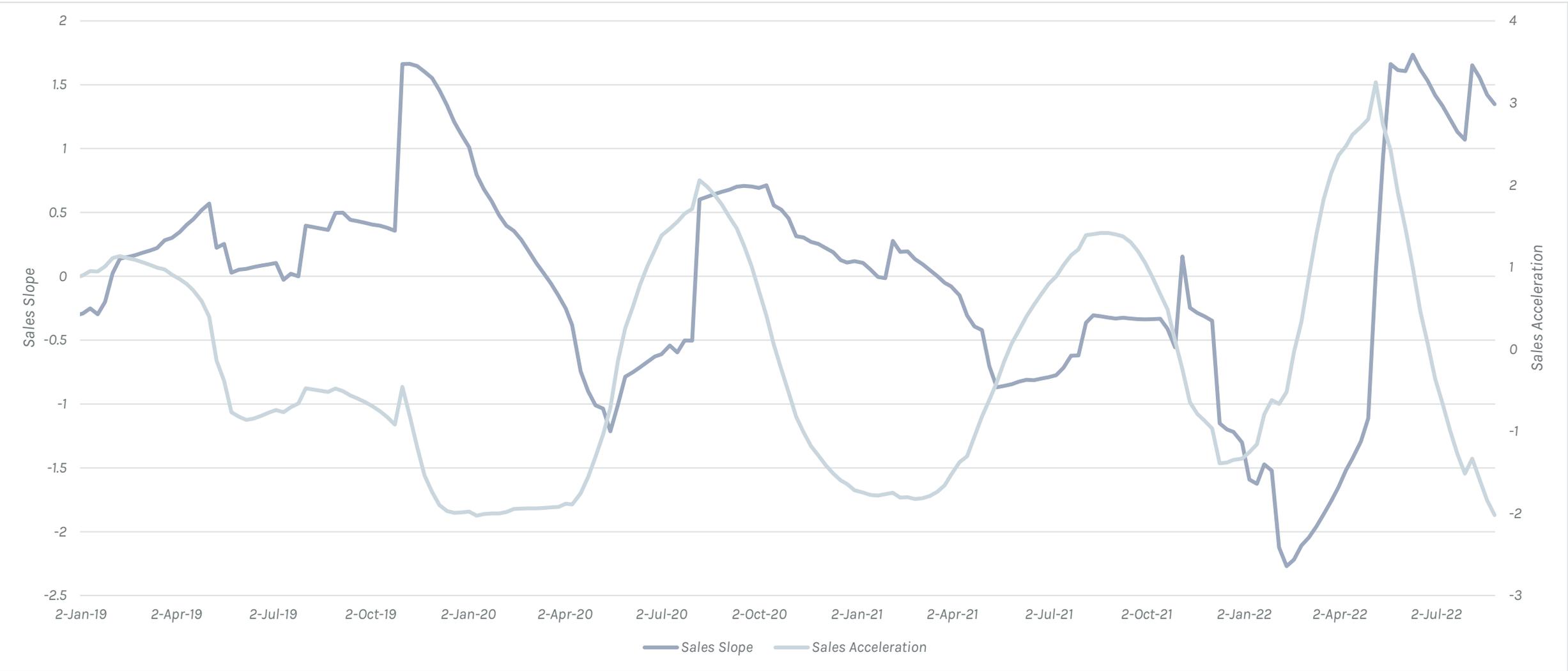
Sales Slope & Acceleration

LNTH



Sales Slope & Acceleration

MCK



Sales Slope & Acceleration

MMSI



Sales Slope & Acceleration

NBIX



Sales Slope & Acceleration

UNH



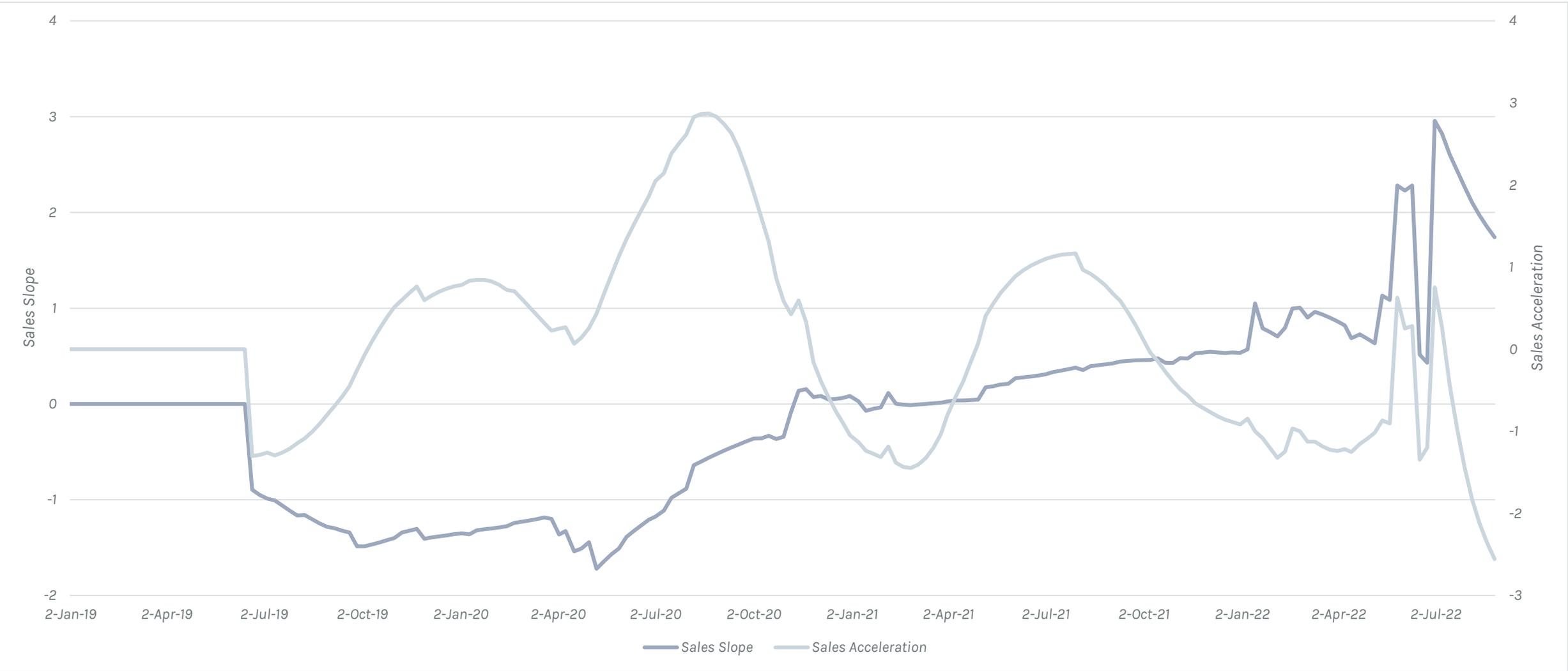
Sales Slope & Acceleration

PODD



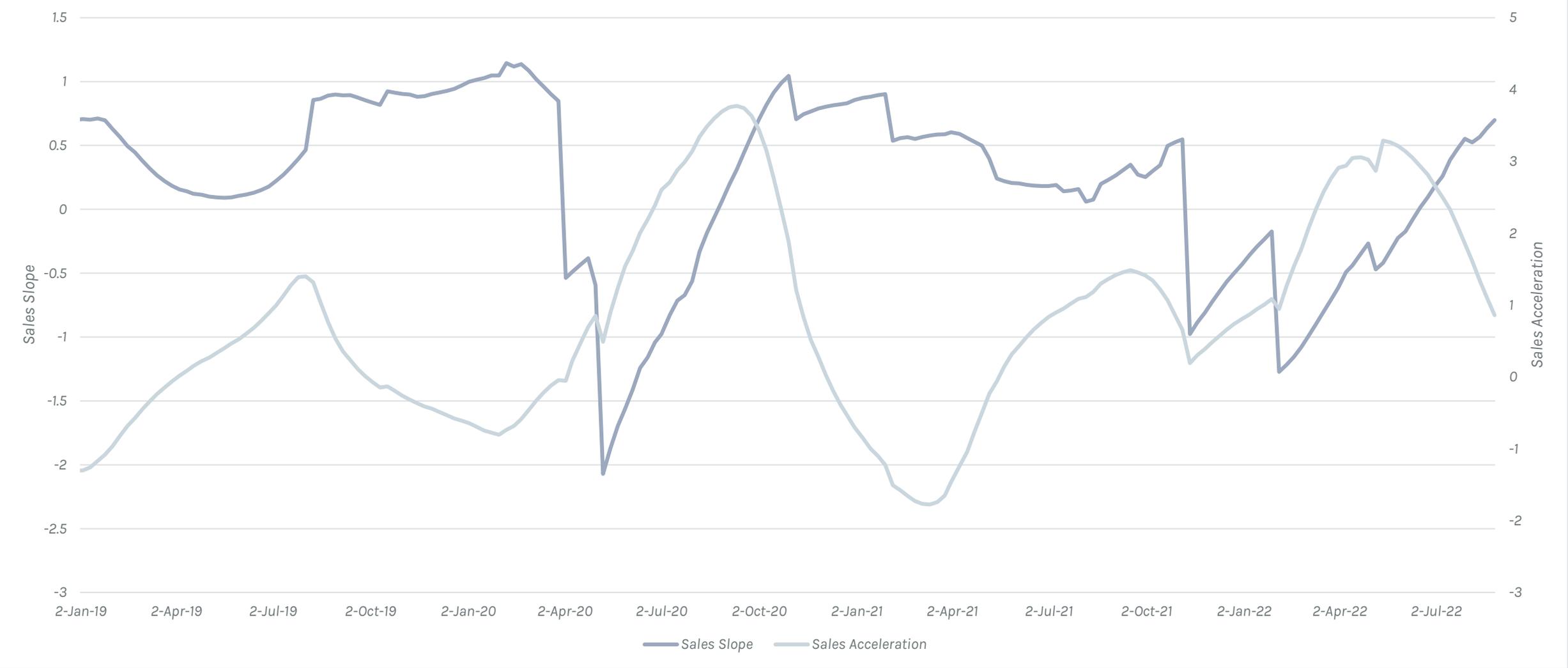
Sales Slope & Acceleration

RCM



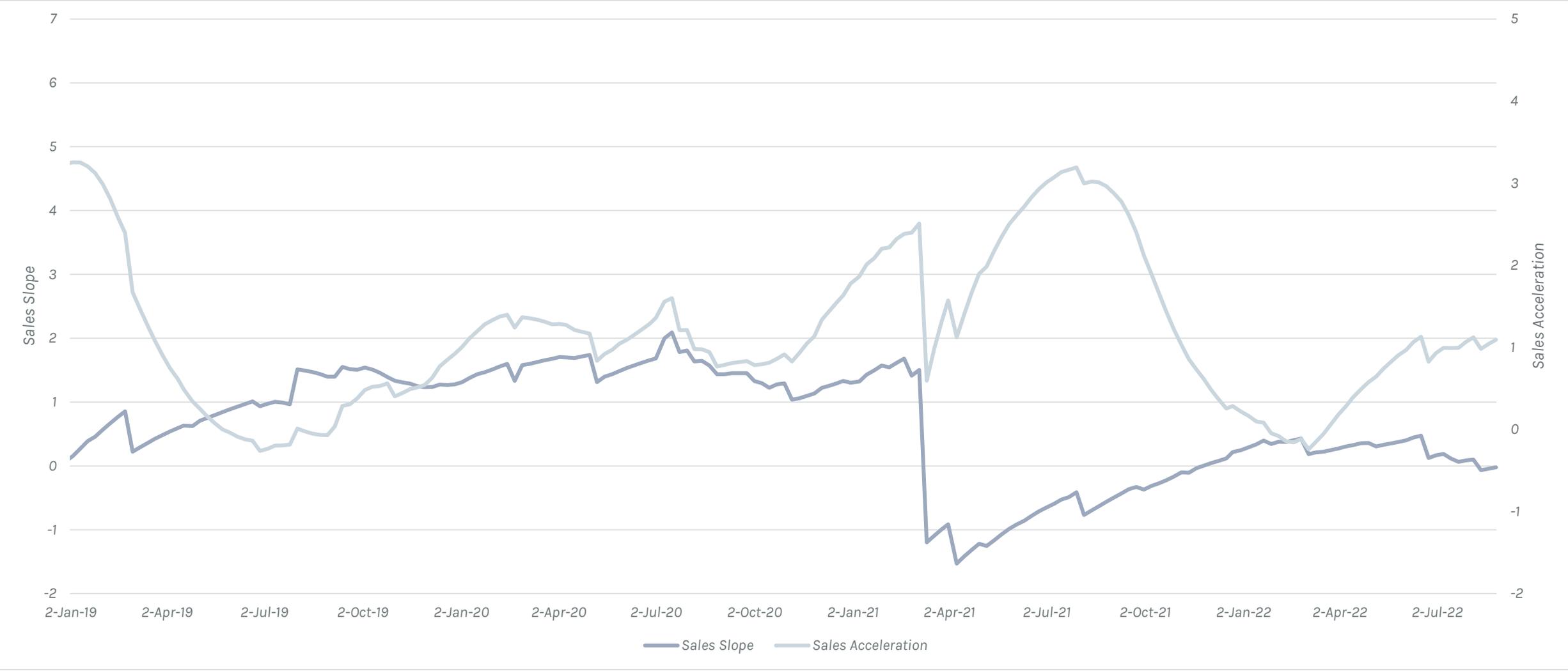
Sales Slope & Acceleration

RCM



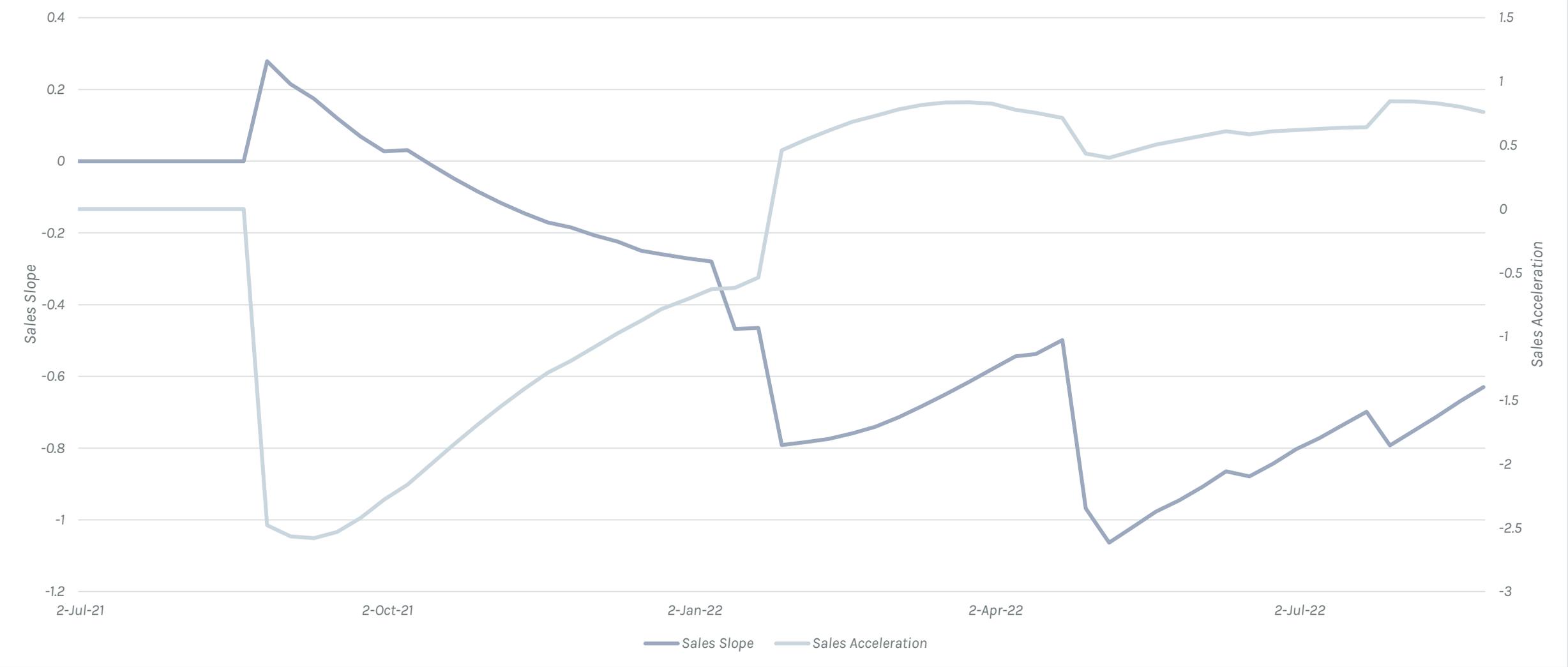
Sales Slope & Acceleration

ACAD



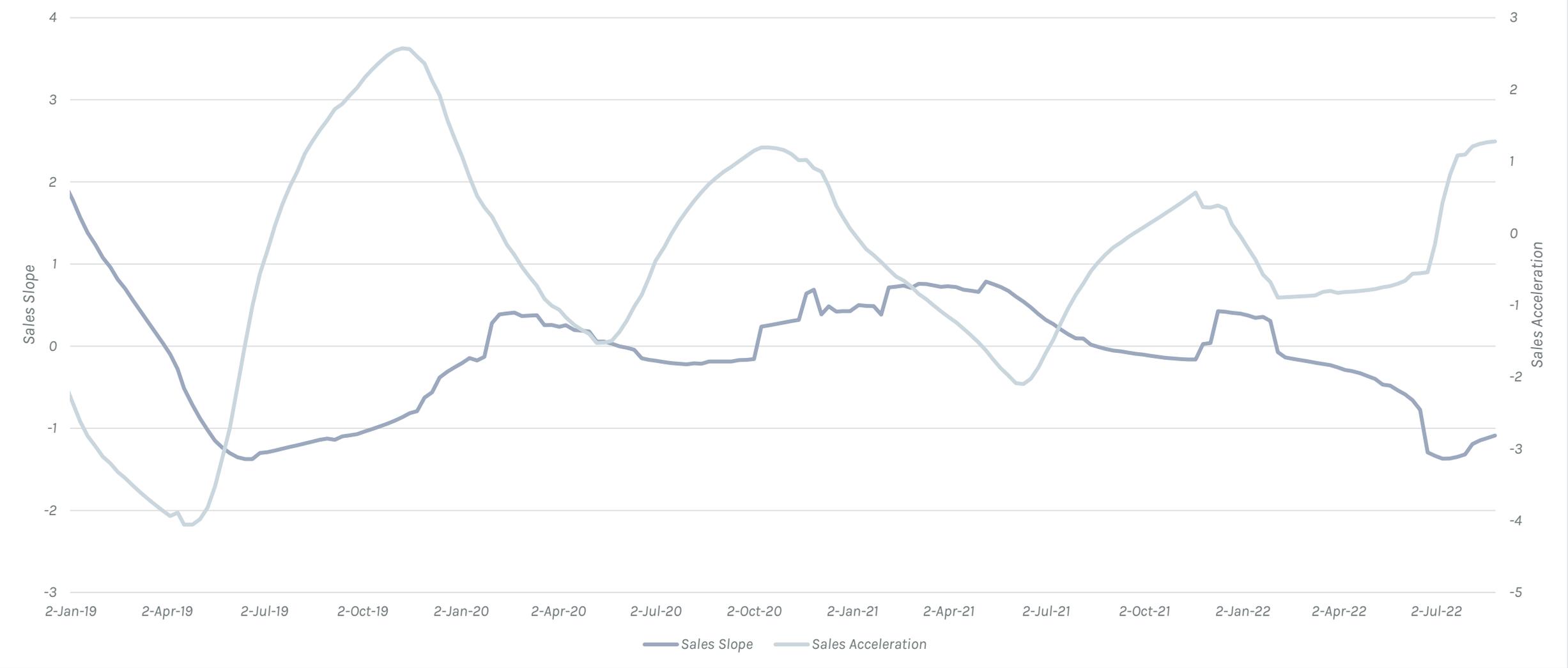
Sales Slope & Acceleration

ACCD



Sales Slope & Acceleration

ARWR



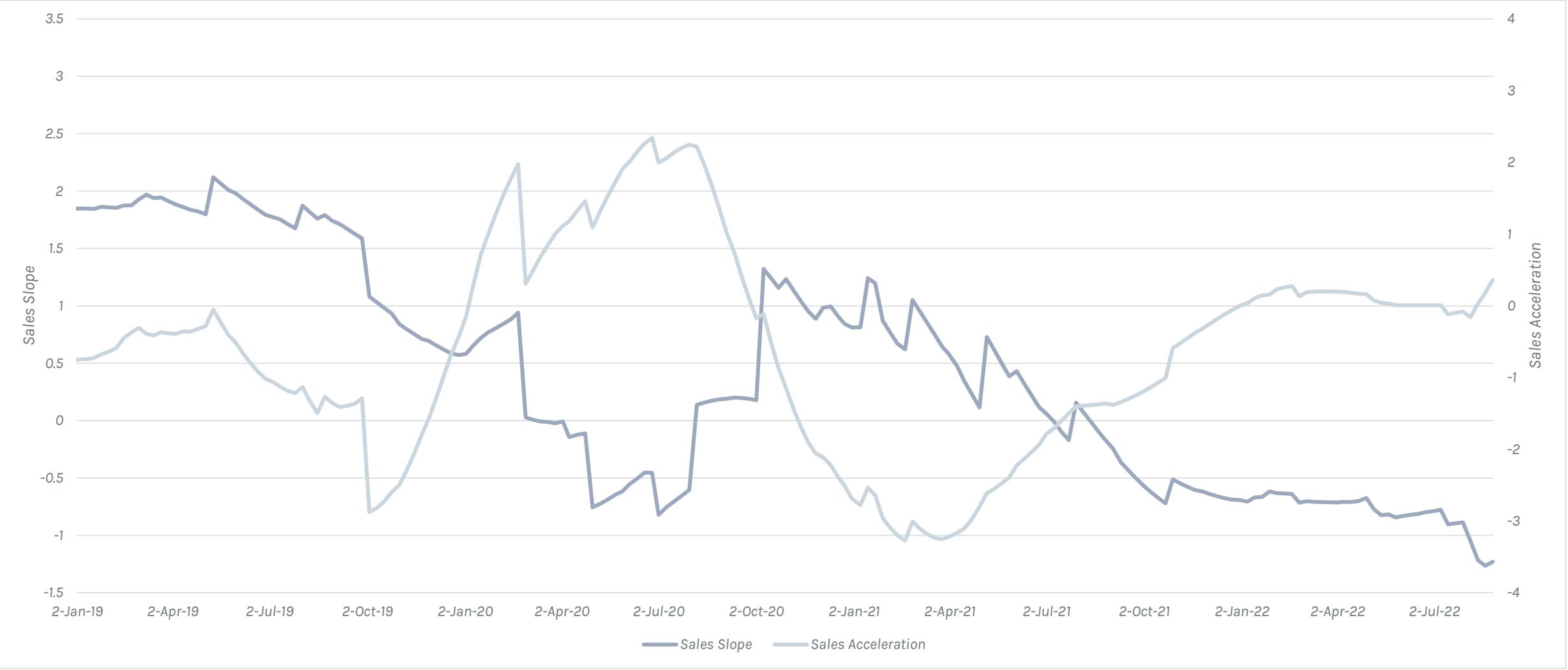
Sales Slope & Acceleration

BBIO



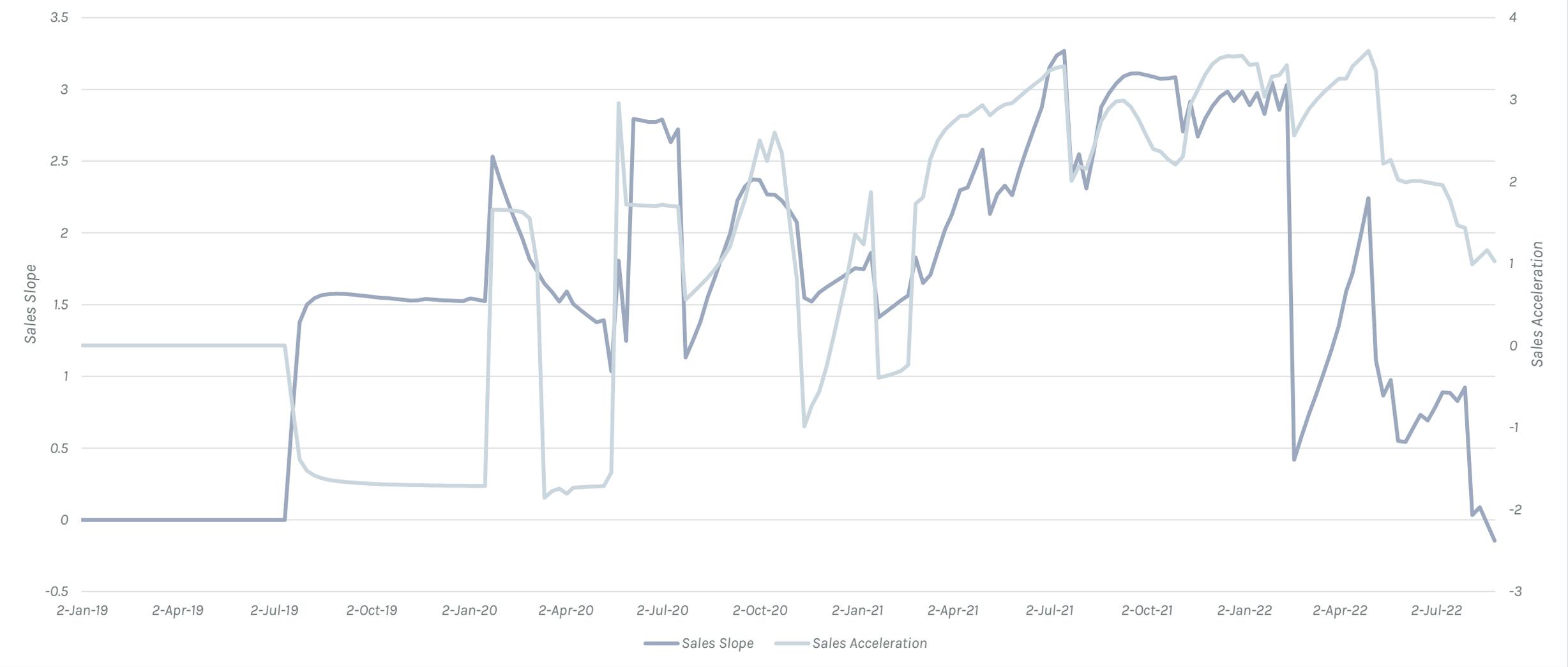
Sales Slope & Acceleration

CDNA



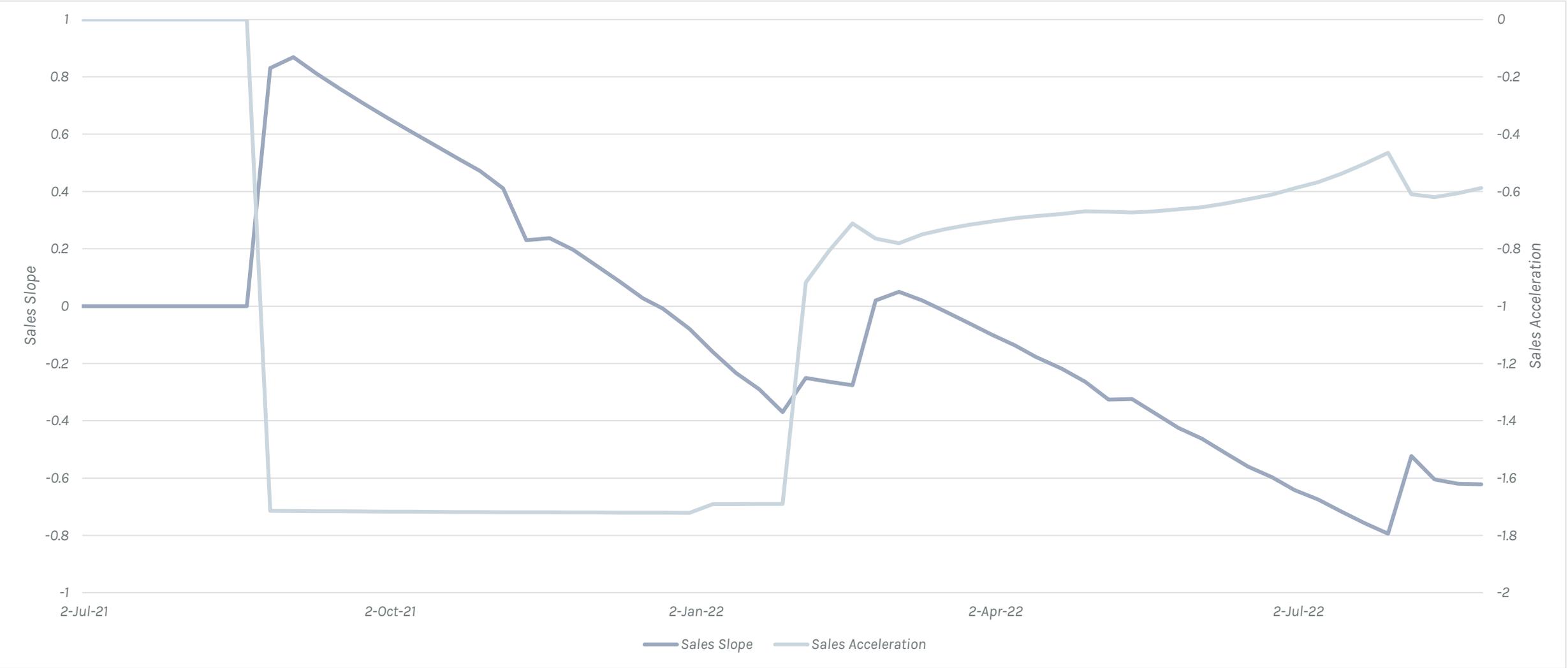
Sales Slope & Acceleration

ADPT



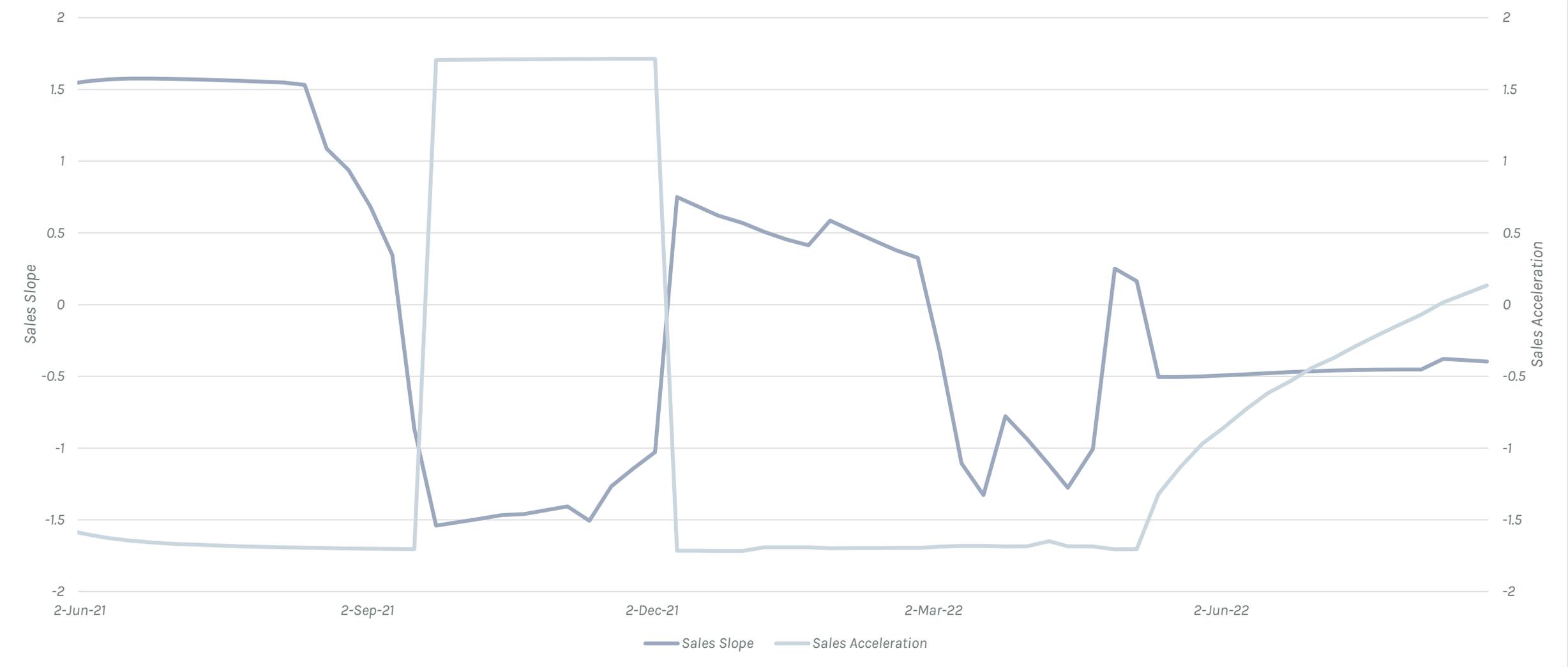
Sales Slope & Acceleration

CLOV



Sales Slope & Acceleration

RXR



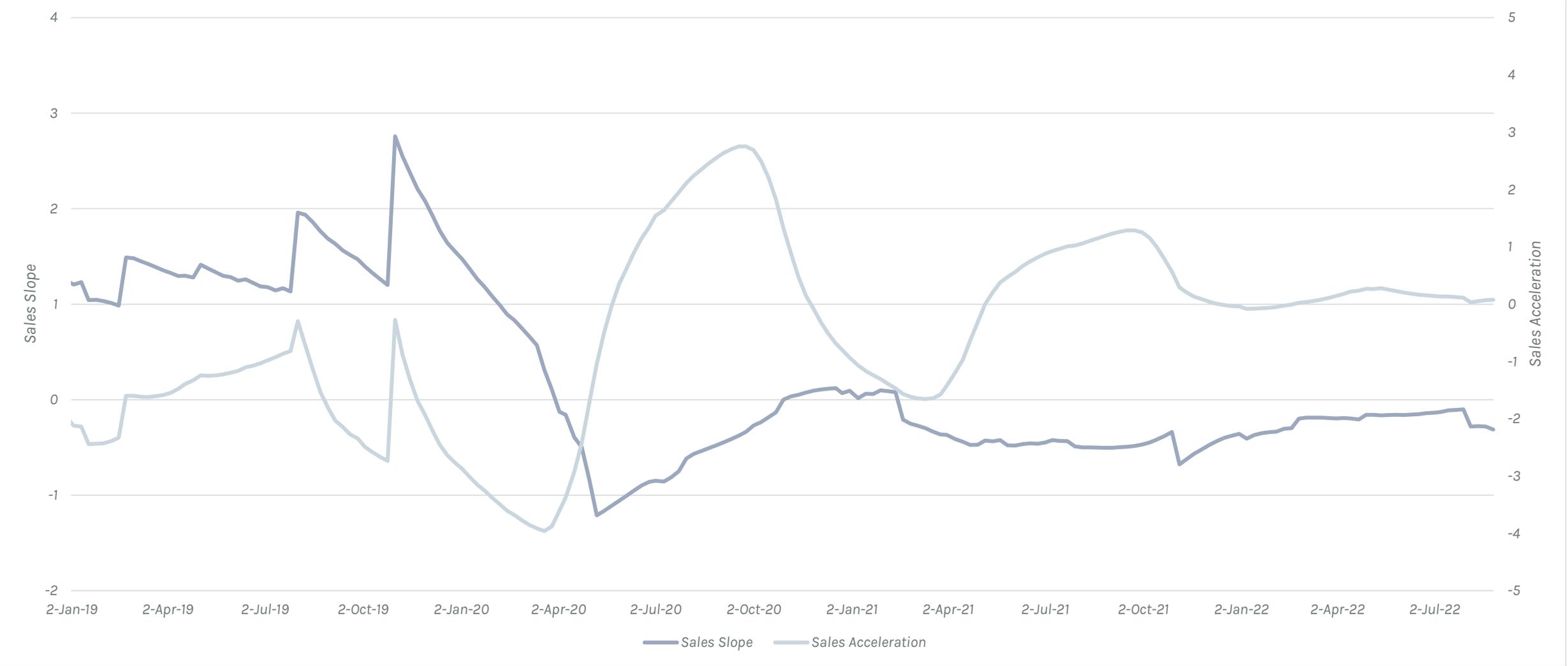
Sales Slope & Acceleration

DNA



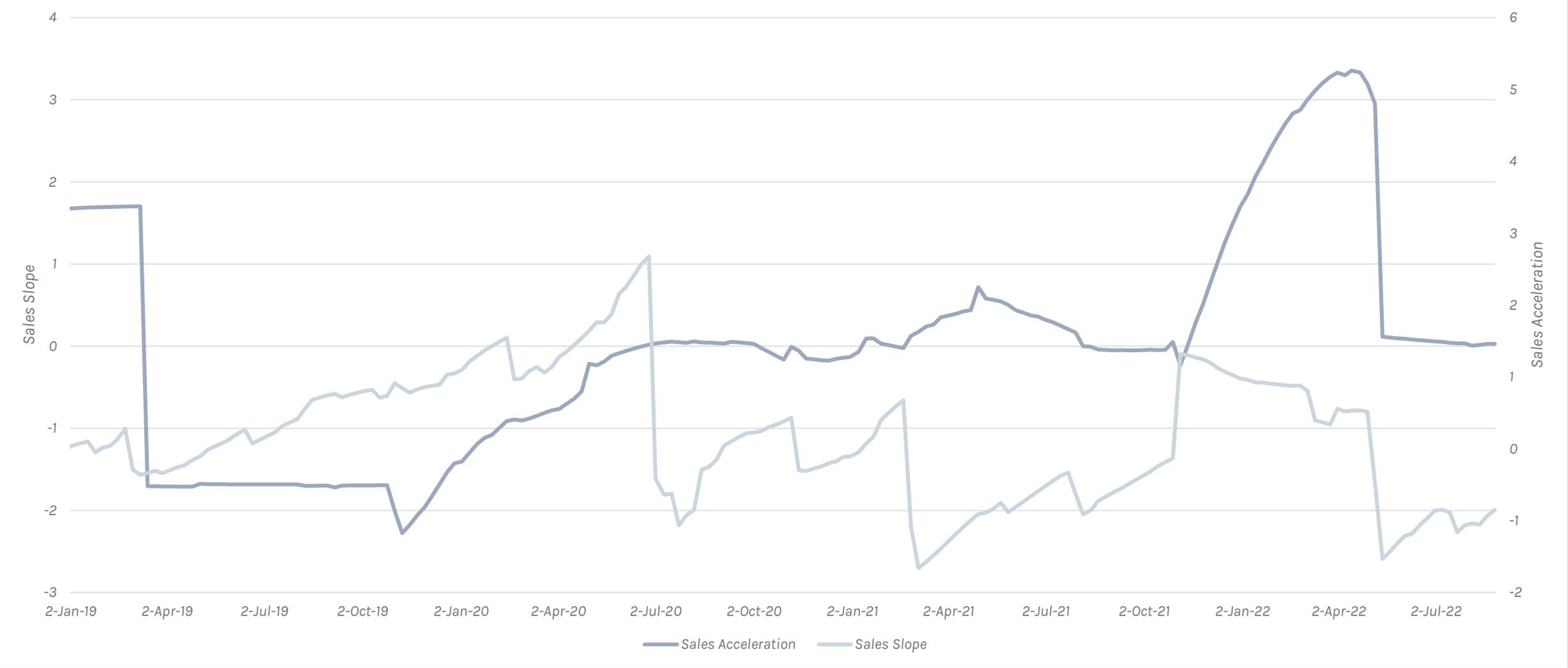
Sales Slope & Acceleration

EXAS



Sales Slope & Acceleration

GH



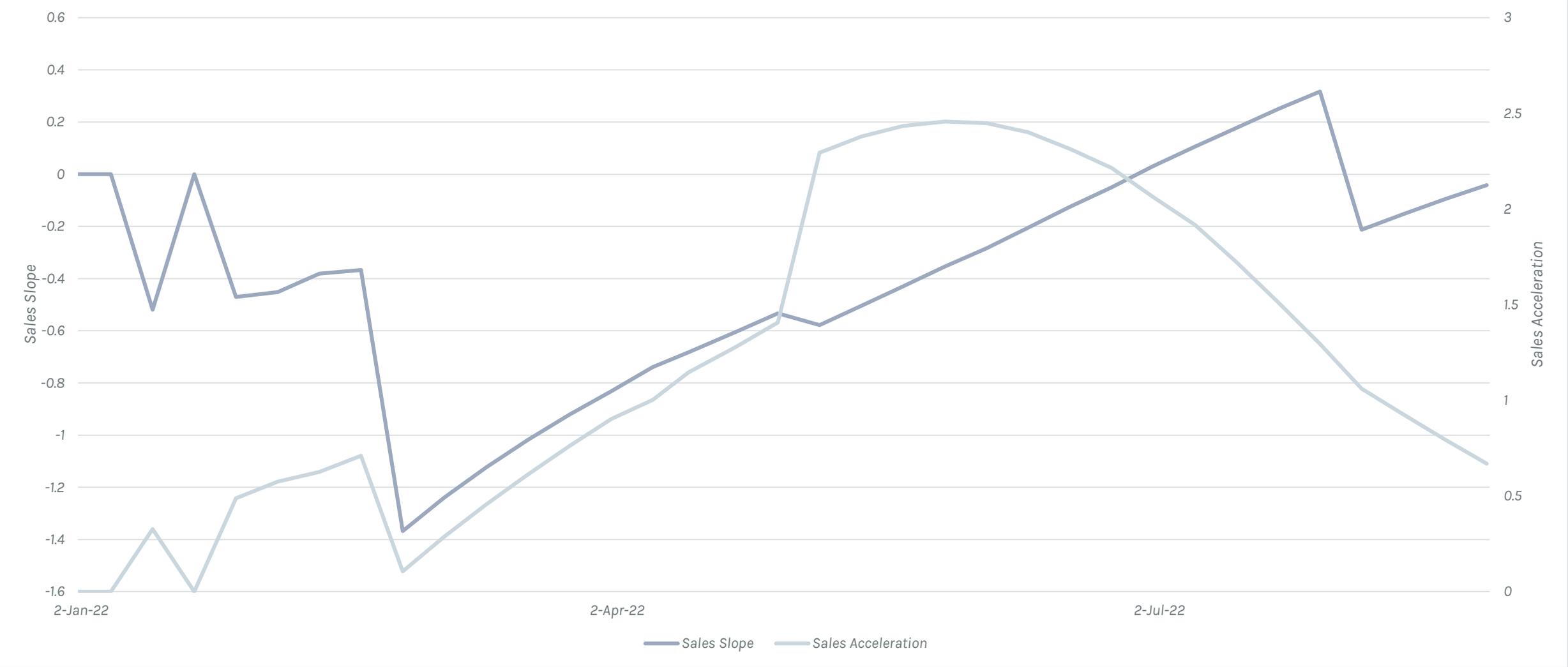
Sales Slope & Acceleration

ICPT



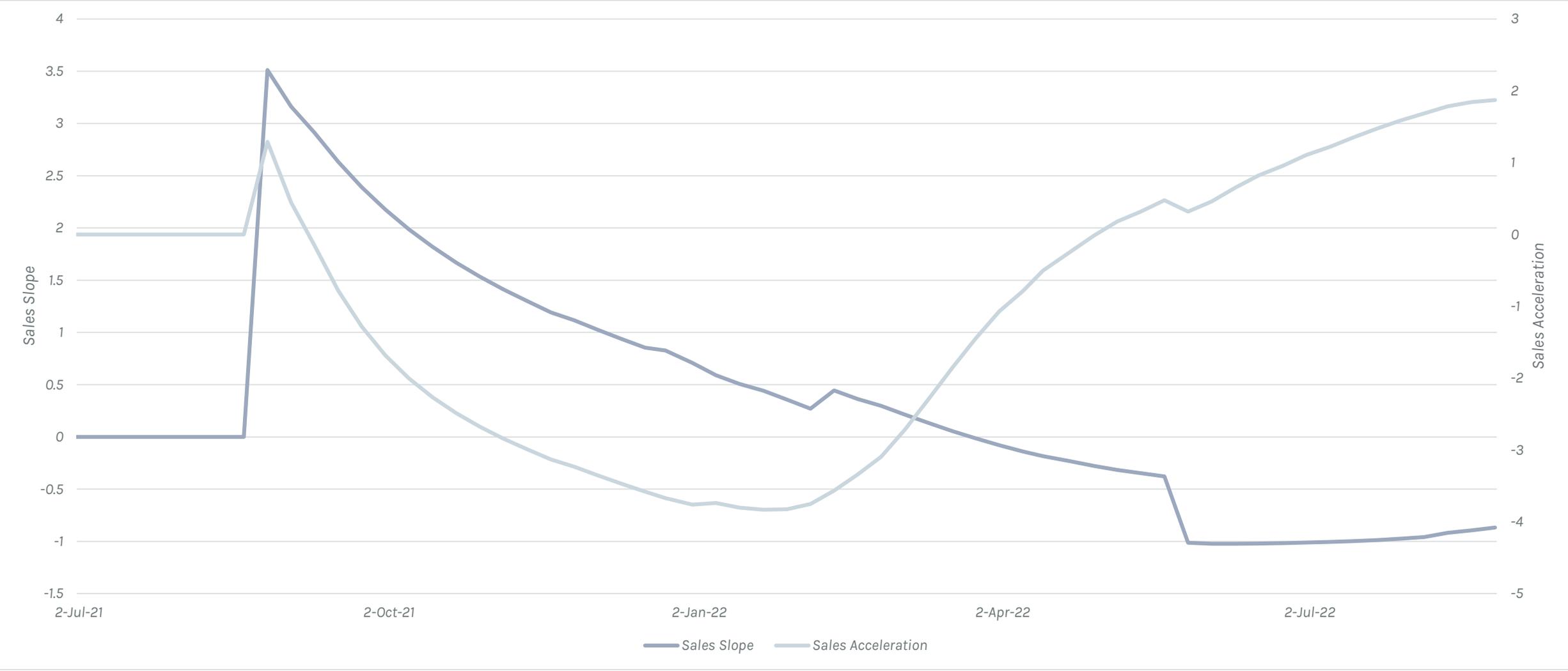
Sales Slope & Acceleration

LUNG



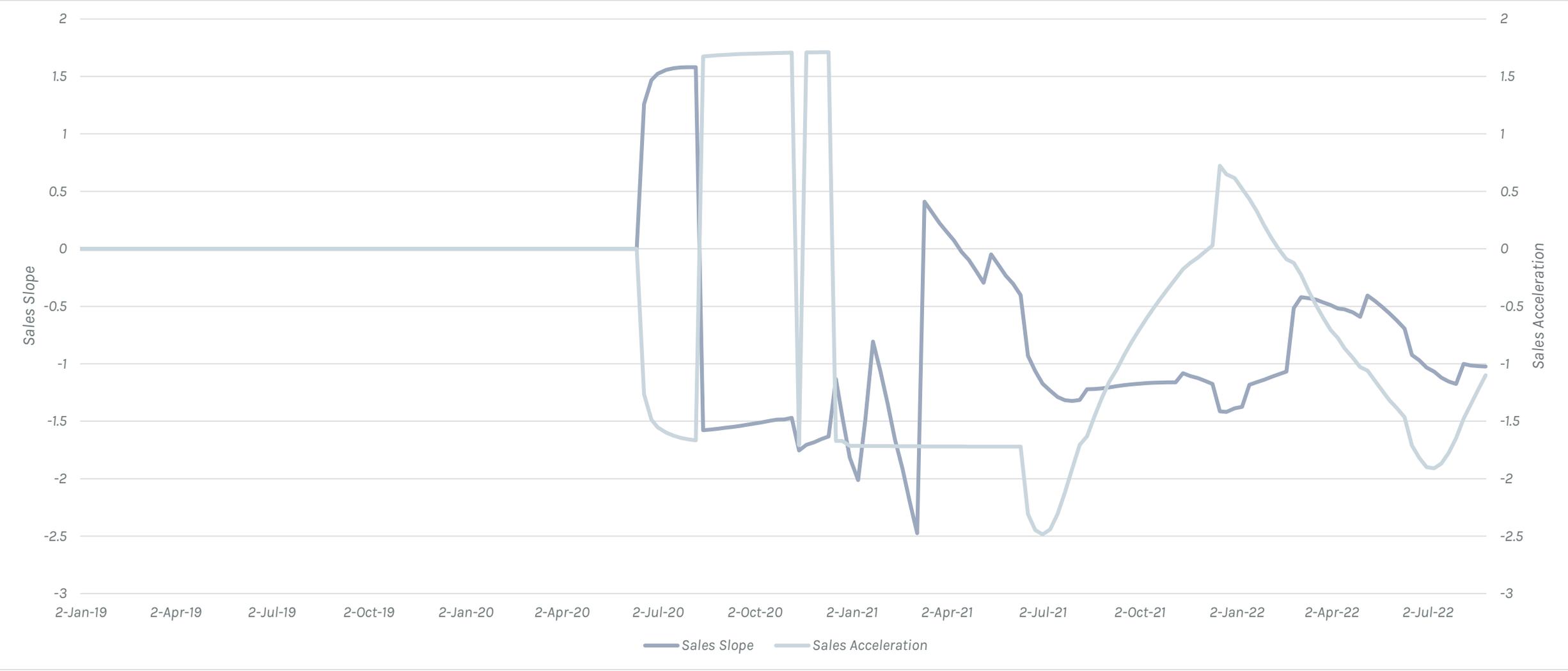
Sales Slope & Acceleration

ME



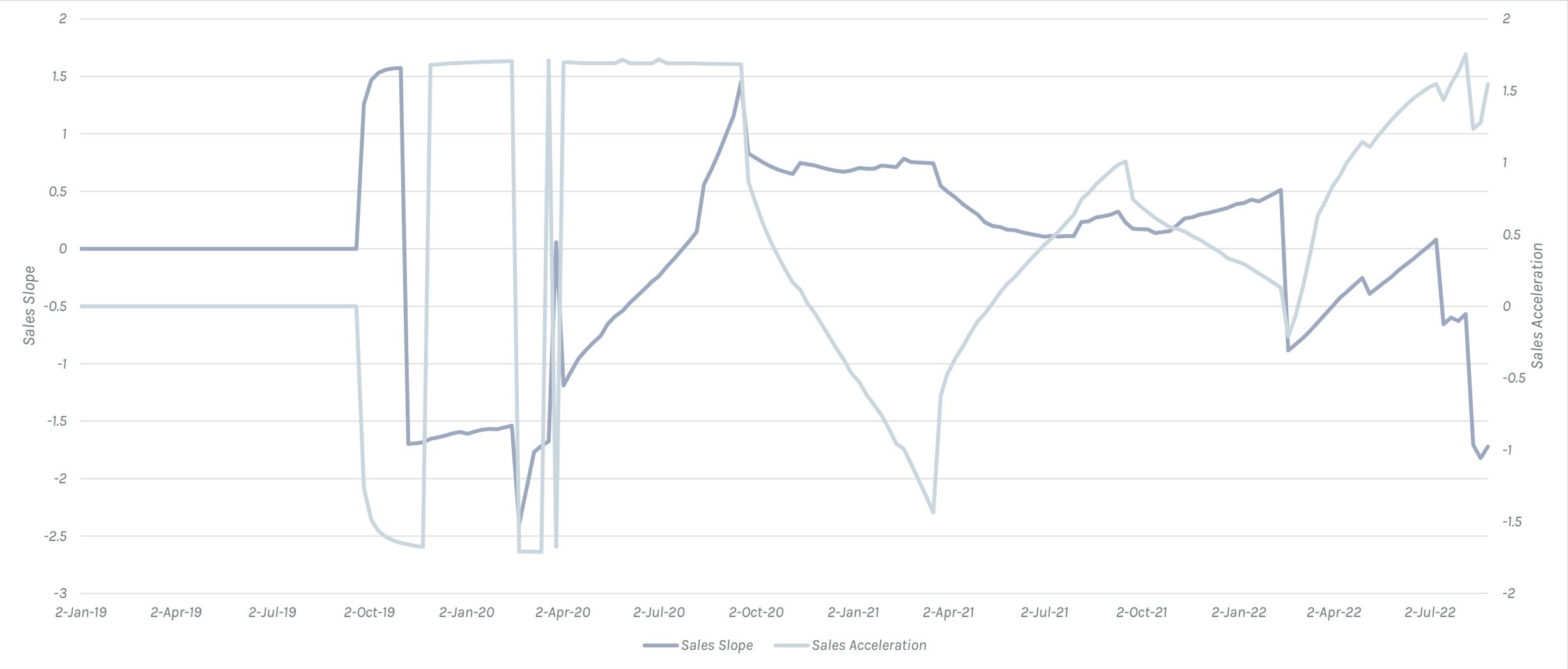
Sales Slope & Acceleration

NARI



Sales Slope & Acceleration

TXG



Sales Slope & Acceleration

NVTA



Sales Slope & Acceleration

ONEM



Sales Slope & Acceleration

OPK



Sales Slope & Acceleration

PACB



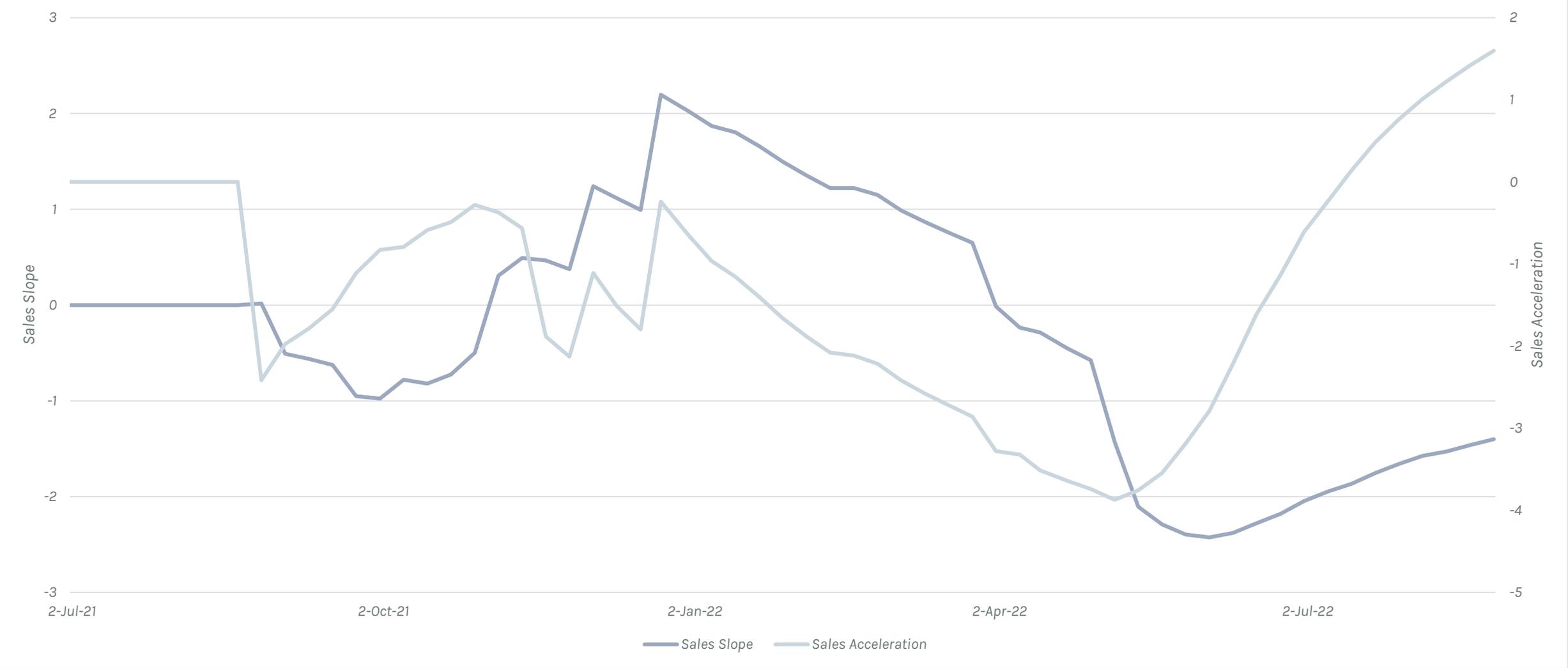
Sales Slope & Acceleration

RARE



Sales Slope & Acceleration

VIR



Sales Slope & Acceleration

VCYT

