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Managed Care

Trend Tracker: December trend accelerates, but overall Q4 below Q3

Industry Overview

Q4 trend decelerated vs Q3 despite December increase

All-in, we estimate 'same store' trend decelerated in Q4 to +0.5% vs +0.9% in Q3. December trend accelerated m/m, driven by higher physician and pharmacy utilization. For the quarter, only physician trend slowed q/q on a PMPM basis (-1.7% y/y in Q4 vs +1.4% in Q3). In general, the slowdown still appears to be pointing to utilization normalization, although part of the slowdown was due to a tougher comp. Nevertheless, following UNH and HUM commentary on higher utilization in Q4, we acknowledge that Market concerns about trend will remain until at least Q1 (probably Q2).

Dec data mixed, physician and pharmacy accelerated m/m

Our monthly Trend Tracker report tracks utilization through an indicator based on our proprietary hospital volume survey, along with high-level industry data sources from hundreds of hospitals, thousands of providers and billions of prescription drug scripts. To track this more granularly, below we break down our monthly data inputs, which show that trend largely accelerated in December, driven by physician and pharmacy trend.

Exhibit 1: Physician and pharmacy utilization accelerated in December, while inpatient and outpatient decelerated

Year over year growth in volume metrics by component of trend, most recent datapoint highlighted based on improving (green) or worsening (red) trend.

Trend Tracker Components	Q123	Q223	Q323	Oct-23	Nov-23	Dec-23
Public Hospital Admissions (estimate in Oct-23 onward)	5.2%	4.3%	3.5%	3.3%	3.3%	3.3%
HHS Hospital Admissions (all-in y/y increase)	0.3%	-0.5%	-1.6%	-1.3%	-1.9%	-1.2%
Kaufman Hall Hospital Admissions	4.3%	4.0%	2.7%	5.0%	3.0%	
Stratadecision Hospital Admissions	6.4%	4.8%	4.2%	4.9%	3.1%	
BofA Survey Hospital Admissions	2.6%	2.3%	2.3%	2.1%	2.2%	2.2%
Inpatient (17% of spend)	**3.7%**	**3.0%**	**2.2%**	**2.8%**	**2.0%**	**1.4%**
Implied Public Hospital Outpatient Volumes (estimate in Oct-23 onward)	13.9%	6.5%	5.1%	6.1%	5.8%	5.2%
Kaufman Hall Implied Outpatient	17.3%	8.4%	7.0%	11.7%	7.4%	
Stratadecision Outpatient	0.7%	2.5%	1.5%	6.5%	2.0%	
BofA Survey Outpatient	3.5%	4.0%	4.0%	5.0%	4.4%	2.8%
Outpatient (29% of spend)	**8.8%**	**5.3%**	**4.4%**	**7.3%**	**4.9%**	**4.0%**
CDC Patient Volumes per Provider	16.1%	5.7%	4.7%	-1.9%	-6.8%	4.6%
New Pharmacy Scripts ex-COVID	5.4%	3.6%	2.5%	2.1%	1.4%	5.0%
Physician (30% of spend)	**10.7%**	**4.6%**	**3.6%**	**0.1%**	**-2.7%**	**4.8%**
Total Pharmacy Scripts ex-COVID	3.0%	2.1%	1.4%	1.0%	0.7%	3.5%
Drugs (22% of spend)	**3.0%**	**2.1%**	**1.4%**	**1.0%**	**0.7%**	**3.5%**
Cost Trend PMPM	**6.3%**	**1.8%**	**0.9%**	**0.7%**	**-1.0%**	**1.5%**

Source: HHS, CDC, Guidepoint, Company Filings, Kaufman Hall's National Hospital Flash Report, IQVIA, Milliman, Strata Decision Technology, StrataSphere data, StrataDecision.com, BofA Global Research

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Key Definitions:

CDC = Centers for Disease Control

HHS = Health and Human Services

HUM = Humana

LT = Long term

MCO = Managed Care Organization

PMPM = Per member per month

UNH = UnitedHealth Group

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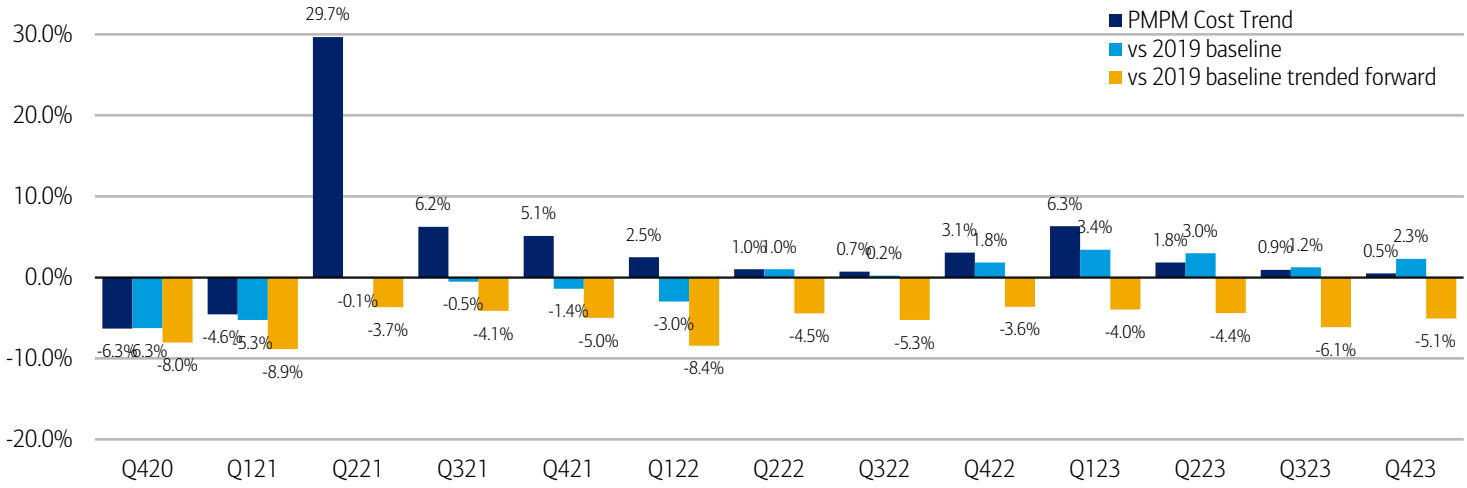
Q4 trend est +0.5%; 40 bps below Q3

Below, we show our proprietary BofA Composite PMPM Utilization Indicator, how it compares to 2019 levels, as well as a trended forward baseline. In past years, we have typically looked at y/y growth and compared it to historical averages to determine inflection points in utilization beyond what an MCO would reasonably price for. However, COVID-19 has significantly skewed utilization (from the initial 20% drop off in April 2020 to subsequent spikes) making it harder to draw conclusions from y/y growth.

All-in, we estimate healthcare utilization on a per member "same store" basis increased +0.5% y/y in Q4. This is a deceleration from +0.9% y/y in Q3. However, this slowing y/y growth is largely due to more difficult comps.

Meanwhile, when compared to 2019 (the last year with normal seasonality), Q4 utilization was +2.3% above the 2019 baseline. Finally, when trending the 2019 base forward by the LT growth rate of each component (the way MCOs generally talk about pricing), all-in trend appears below that benchmark (-5.1%).

Exhibit 2: All-in PMPM trend above 2019 levels
BofA Composite PMPM Healthcare Utilization Indicator vs 2019 baseline



Source: HHS, CDC, Guidepoint, Company Filings, Kaufman Hall's National Hospital Flash Report, IQVIA, Milliman, Strata Decision Technology, StrataSphere data, StrataDecision.com, BofA Global Research
Disclaimer: The Indicator identified as BofA Composite PMPM Healthcare Utilization Indicator above is intended to be an indicative metric only and may not be used for reference purposes or as a measure of performance for any financial instrument or contract, or otherwise relied upon by third parties for any other purpose, without the prior written consent of BofA Global Research. This indicator was not created to act as a benchmark.

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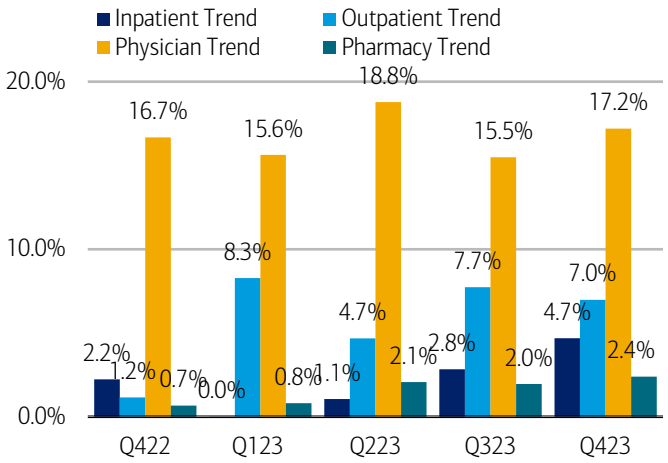
Physician above 2019 trended forward

Below we show how each of the major components of our utilization tracker are trending. Currently, physician, pharmacy, inpatient, and outpatient volumes are all tracking ahead of 2019 levels on an absolute basis. On a per member basis (the way MCOs usually talk about trend), only physician and outpatient volumes are ahead of 2019 levels.

Exhibit 3: From a total utilization perspective, in Q4, all components are trending above 2019
BofA Composite Healthcare Utilization Indicator components vs 2019 baseline



Source: HHS, CDC, Guidepoint, Company Filings, Kaufman Hall's National Hospital Flash Report, IQVIA, Milliman, Strata Decision Technology, StrataSphere data, StrataDecision.com, BofA Global Research

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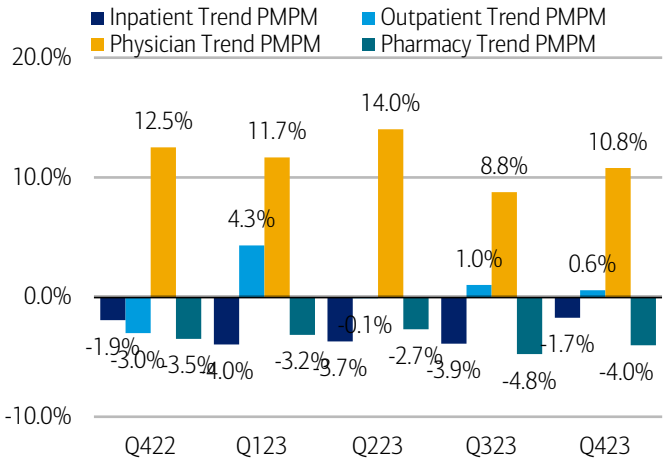
Exhibit 4: On a PMPM basis, in Q4, only physician and outpatient above 2019 levels
BofA Composite Healthcare Utilization Indicator components PMPM vs 2019 baseline



Source: HHS, CDC, Guidepoint, Company Filings, Kaufman Hall's National Hospital Flash Report, IQVIA, Milliman, Strata Decision Technology, StrataSphere data, StrataDecision.com, BofA Global Research

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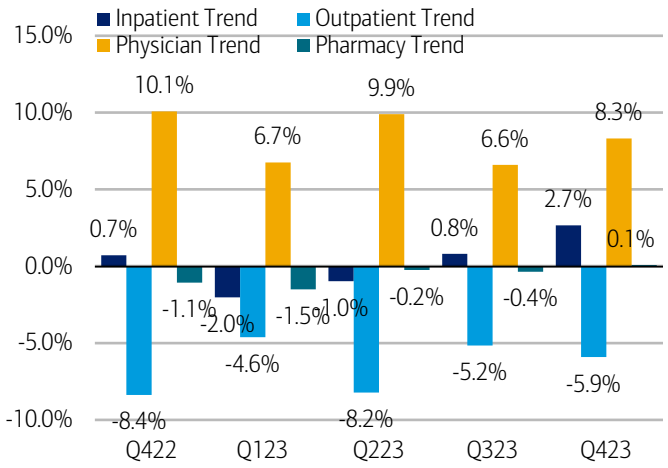
Physician, inpatient, and pharmacy are above 2019 when trending that baseline forward by the LT growth rates. On a PMPM basis, only physician is above 2019 trended forward. We note that certain inputs to our tracker are on a delay, which may cause certain components of this analysis to lag recent MCO commentary.

Exhibit 5: From a total utilization perspective, physician, inpatient, and pharmacy are above 2019 trended forward, while outpatient remains below
BofA Composite Healthcare Utilization Indicator components vs 2019 baseline trended forward



Source: HHS, CDC, Guidepoint, Company Filings, Kaufman Hall's National Hospital Flash Report, IQVIA, Milliman, Strata Decision Technology, StrataSphere data, StrataDecision.com, BofA Global Research

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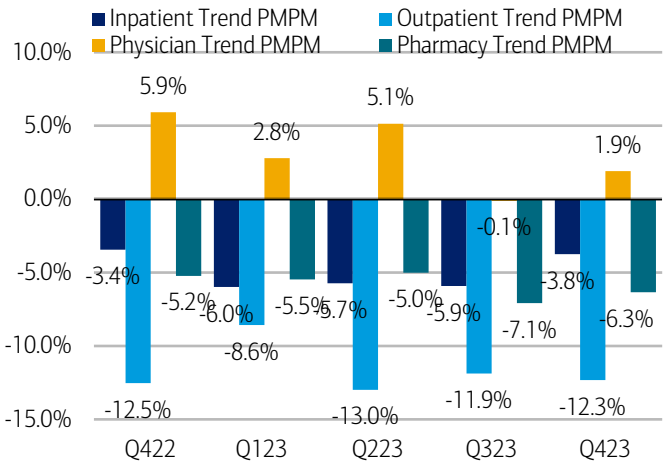
Exhibit 6: On a PMPM basis, only physician is above 2019 trended forward, while all other components remains below
BofA Composite Healthcare Utilization Indicator components PMPM vs 2019 baseline trended forward



Source: HHS, CDC, Guidepoint, Company Filings, Kaufman Hall's National Hospital Flash Report, IQVIA, Milliman, Strata Decision Technology, StrataSphere data, StrataDecision.com, BofA Global Research

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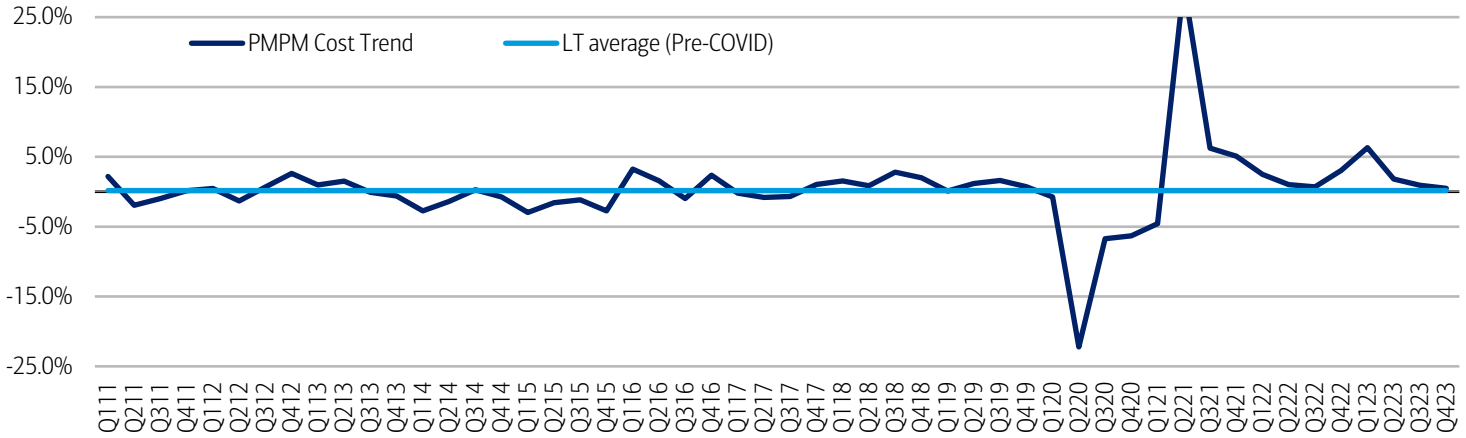
Y/Y PMPM trend growth below LT, but metrics skewed by COVID disruptions

Y/Y PMPM trend growth of +0.5% in Q4 is above the historical average of 0.2%, but it is difficult to draw conclusions from the y/y growth. We've been publishing this monthly trend tracker since 2011, relying on y/y growth trends vs historical averages to identify

inflection points in utilization. However, ever since 2020 when COVID emerged, utilization trends have been thrown off normal seasonality, making it harder to draw conclusions from changes in y/y growth rates. With time, as COVID continues to fade, y/y growth metrics will become more reliable indicators, rather than comparing to the 2019 baseline.

Exhibit 7: Y/y data from our trend tracker has been heavily disrupted by COVID
BofA Composite PMPM Healthcare Utilization Indicator



Source: HHS, CDC, Guidepoint, Company Filings, Kaufman Hall's National Hospital Flash Report, IQVIA, Milliman, Strata Decision Technology, StrataSphere data, StrataDecision.com, BofA Global Research
2011-2014 relies on data from Publically traded Hospital Volumes, BofA's Volume Survey, and IQVIA exclusively. Starting in 2015 we started to incorporate CDC sentinel provider data. Starting in 2020 we also include Kaufman Hall's National Hospital Flash Report and HHS's inpatient occupancy tracker.
Disclaimer: The Indicator identified as BofA Composite PMPM Healthcare Utilization Indicator above is intended to be an indicative metric only and may not be used for reference purposes or as a measure of performance for any financial instrument or contract, or otherwise relied upon by third parties for any other purpose, without the prior written consent of BofA Global Research. This indicator was not created to act as a benchmark.

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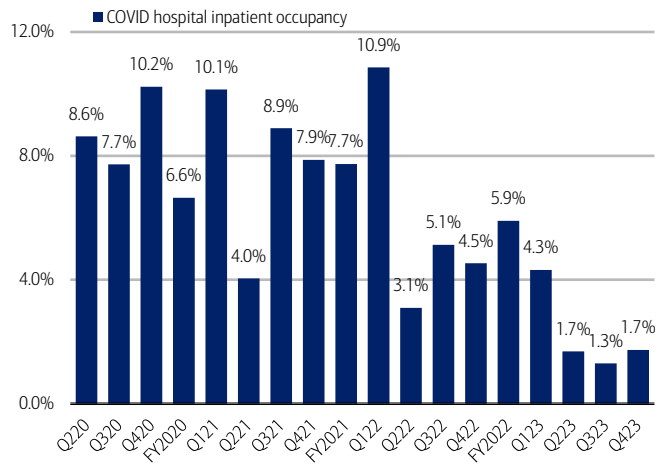
COVID testing & occupancy down y/y in Q4

One area of spending worth taking a closer look at is COVID. Even though it is generally accounted for in the overall utilization tracker, it is still difficult to tell how much volume growth in general was built into pricing at such a high level. For COVID spending specifically, 2021 was clearly above expectations, with both COVID hospitalizations and testing volumes ending above 2020 levels. COVID costs peaked in Q1 2022, but declined meaningfully since then.

In Q4, COVID tests per day increased sequentially from Q3 but are down 79% y/y. COVID hospitalizations are also up sequentially but down y/y.

Exhibit 8: COVID hospitalizations in Q4 above Q3 average...
% of hospital occupancy attributed to COVID



Source: HHS, BofA Global Research

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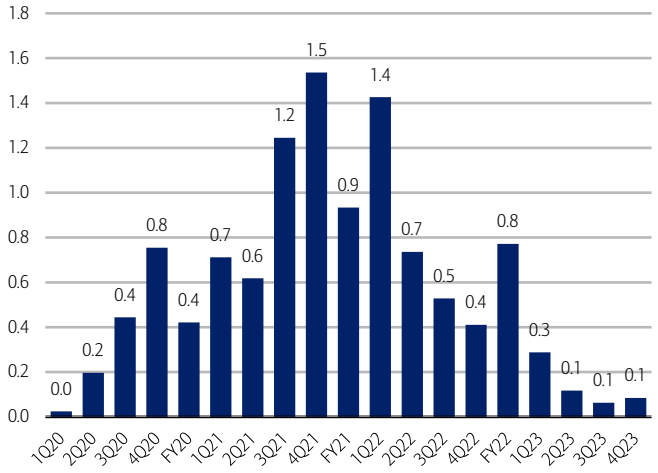
Exhibit 9: COVID tests also up sequentially in Q4
Recorded COVID tests per day in a given period



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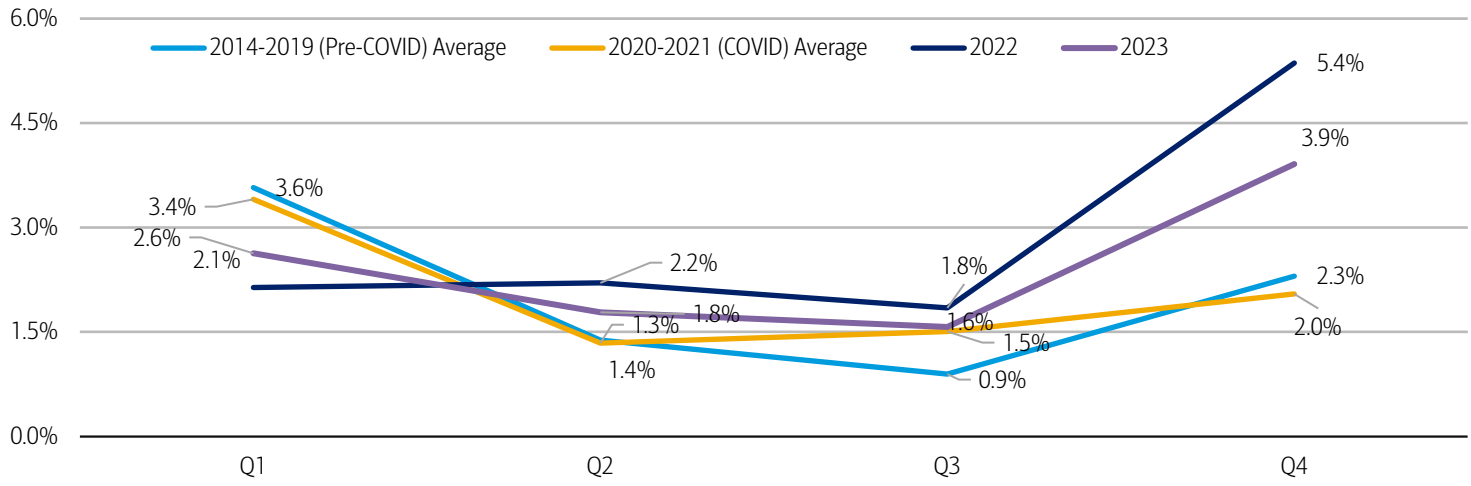
Flu volumes elevated in Q4, but lower y/y

Flu volumes in 4Q23 are higher than pre-COVID. However, they are still below 4Q22 levels, which is a modest tailwind y/y.

Exhibit 10: CDC data indicating Q4 flu volumes above pre-COVID averages
Weighted percentage of visits related to influenza like illness reported by the CDC sentinel providers



Source: CDC, BofA Global Research

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MCO commentary on utilization trends

In Q4, UNH and HUM saw an uptick in utilization among seniors. At an investor conference in early January, CI and CNC noted that Q4 utilization is in line with their expectations; meanwhile, CVS pointed to MLR coming in above its expectations.

Exhibit 11: Most MCOs content with trend into Q4/2024
Recent commentary and color around utilization by MCO

Ticker	Q423 commentary
CI	So within that, our EPS outlook was reiterated relative to 2023. You can infer relative to that because I know there's been some questions relative to how is medical cost utilization tracking. Broadly speaking for the fourth-quarter, it's in line with our expectations.
CNC	Medicaid utilization has come back through the year, I'd say, it's back to sort of pre pandemic normal. [...] We did see COVID tick-up in the quarter, as you've probably read. [...] And in terms of what you're seeing in the 4th-quarter [...] Everything still trending more or less in-line with your expectations. Yeah. I would just reiterate guidance. So, yeah, once again COVID uptick. Consistent with what public data is out there. Medicare as expected, but still at elevated level that we saw sort of tick-up in May, we talked about that on the Q2 call.

Exhibit 11: Most MCOs content with trend into Q4/2024
Recent commentary and color around utilization by MCO

Ticker	Q423 commentary
CVS	We've continued to see pressure in the HCB business. [...] I would expect that you would see for 2023 that the MBR might exceed kind of that 86% that we had talked about based on where the fourth quarter is likely to land.
ELV*	The consolidated benefit expense ratio for the third quarter was 86.8%, an improvement of 40 basis points compared to the third quarter of last year, driven by premium rate adjustments to cover medical cost trend and solid performance within our government business.
HUM	Actual fourth quarter results reflect an additional increase in Medicare Advantage medical cost trends, driven by higher than anticipated inpatient utilization, primarily for the months of November and December, as well as a further increase in non-inpatient trends, predominantly in the categories of physician, outpatient surgeries and supplemental benefit [...]
MOH*	Medicare's results came in below our expectations with a reported MCR of 92.4%. In the quarter, we continued to experience higher utilization of outpatient, professional, and in-home services; all of which we believe we appropriately addressed in our 2024 bids. And finally Marketplace, with a reported MCR of 78.9% continues to perform well. Medical cost trends are in line with our pricing assumptions in our improved risk adjustment performances meaningful
UNH	Care patterns remain consistent with those we shared with you in the first half of '23. Activity levels continue to be led by outpatient care for seniors with orthopedic and cardiac procedure categories among the more prominent. As we've noted, our benefit design approach assumed these activity levels persist throughout '24. And the care patterns we observed exiting '23 reconfirmed that decision. On the margin, we saw some modest late-year seasonal activity, such as strong and welcome response from seniors to scheduled physicians at this to receive RSV vaccinations. In some cases, these were accompanied by additional care being obtained, especially for people that had not seen a physician in some time.

Source: Bloomberg, company commentary. * indicates commentary is from Q323.

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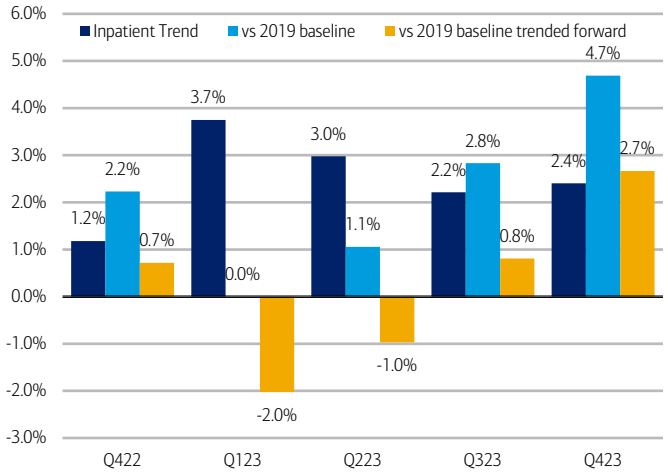
PMPM inpatient below 2019 trended forward

Inpatient spending is 17% of total trend according to Milliman. In Q4, total inpatient volumes are tracking up +2.4% y/y and +4.7% above 2019 levels. Meanwhile, inpatient volumes are tracking +2.7% above 2019 levels if trended forward by the LT growth rate (+0.5%).

On a PMPM basis, inpatient volumes are up only +0.2% y/y in Q4. Meanwhile, inpatient volumes are -1.7% below 2019 levels and -3.8% below 2019 trended forward.

Exhibit 12: On an absolute basis, inpatient utilization above 2019 levels
BofA Composite Healthcare Utilization Indicator – Inpatient Trend component vs 2019 baseline



Source: HHS, Guidepoint, Company Filings, Kaufman Hall's National Hospital Flash Report, Strata Decision Technology, StrataSphere data, StrataDecision.com, BofA Global Research

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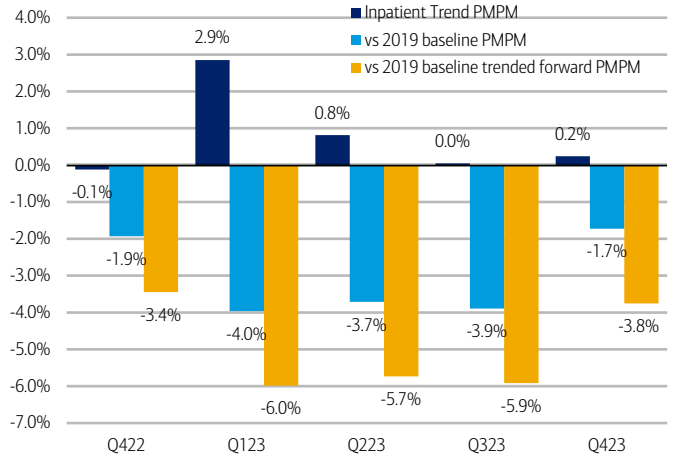
Exhibit 13: On a PMPM, inpatient utilization below 2019 levels
BofA Composite Healthcare Utilization Indicator – Inpatient Trend component PMPM vs 2019 baseline



Source: HHS, Guidepoint, Company Filings, Kaufman Hall's National Hospital Flash Report, Strata Decision Technology, StrataSphere data, StrataDecision.com, BofA Global Research

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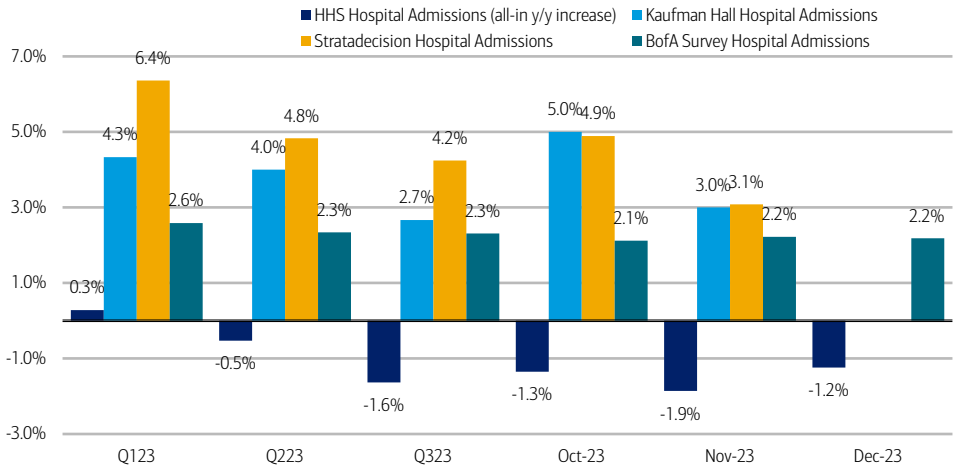
Looking at the y/y growth on a m/m basis, inpatient utilization in December accelerated. Our proprietary volume survey pointed to stable inpatient volume growth m/m (see our December Hospital Survey), but hospital admissions as per HHS accelerated m/m.

Exhibit 14: Inpatient trend in December decelerated
Breaking down the components of inpatient trend calculation by monthly inputs



Source: HHS, Guidepoint, Company Filings, Kaufman Hall's National Hospital Flash Report, Strata Decision Technology, StrataSphere data, StrataDecision.com, BofA Global Research. Some data is reported on a lag, and may be blank for the current month.

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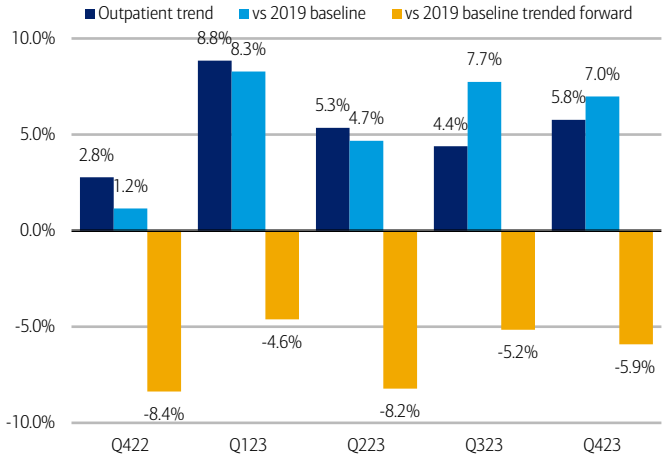
Outpatient tracking below 2019 trended forward

Outpatient spending is weighted at 29% of trend according to Milliman. In Q4, outpatient volumes were up +5.8% y/y and +7.0% above 2019 levels, but -5.9% below 2019 levels if trended forward by the LT growth rate (+3.1%).

On a PMPM, Q4 outpatient volumes were up +3.6% y/y and +0.6% above 2019 levels. Meanwhile, PMPM outpatient volumes were -12.3% below 2019 trended forward.

Exhibit 15: Total outpatient well above 2019 levels
BofA Composite Healthcare Utilization Indicator – Outpatient Trend component vs 2019 baseline



Source: Guidepoint, Company Filings, Kaufman Hall's National Hospital Flash Report, Strata Decision Technology, StrataSphere data, StrataDecision.com, BofA Global Research

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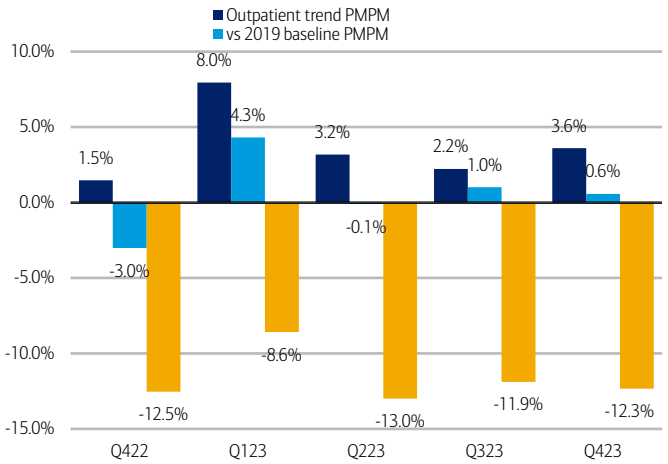
Exhibit 16: PMPM outpatient only slightly above 2019 levels
BofA Composite Healthcare Utilization Indicator – Outpatient Trend component PMPM vs 2019 baseline



Source: Guidepoint, Company Filings, Kaufman Hall's National Hospital Flash Report, Strata Decision Technology, StrataSphere data, StrataDecision.com, BofA Global Research

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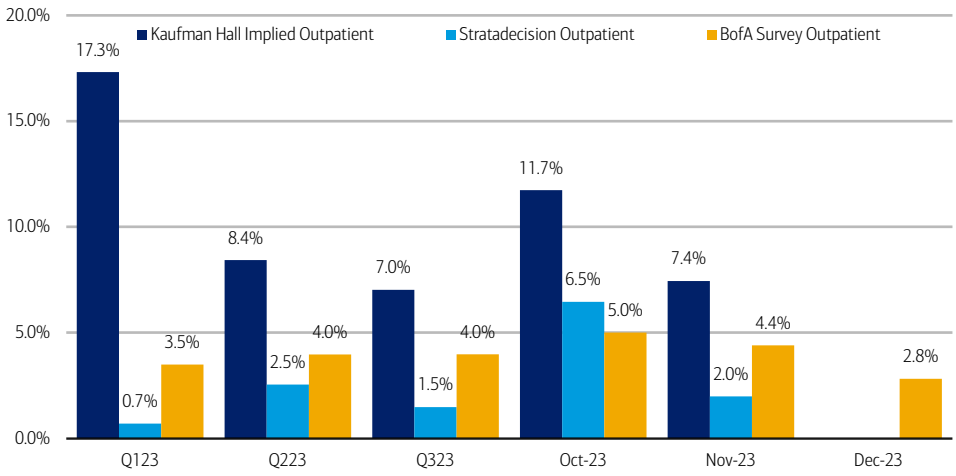
Looking at the y/y growth on a m/m basis, outpatient utilization decelerated in December based on our hospital volume survey data.

Exhibit 17: Outpatient trend into December decelerated
Breaking down the components of outpatient trend calculation by monthly inputs



Source: HHS, Guidepoint, Company Filings, Kaufman Hall's National Hospital Flash Report, Strata Decision Technology, StrataSphere data, StrataDecision.com, BofA Global Research. Some data is reported on a lag, and may be blank for the current month.

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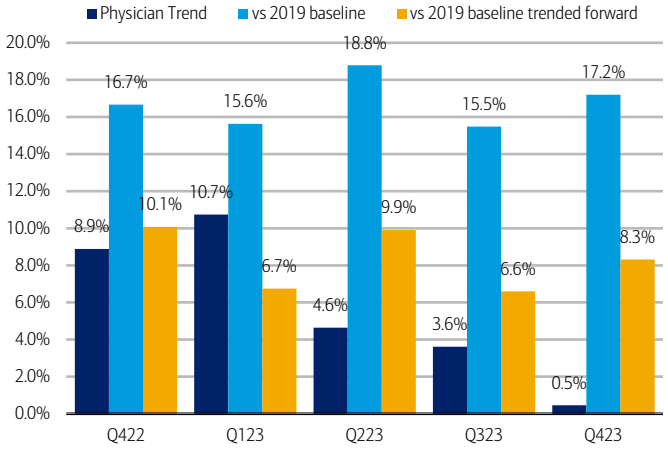
Physician above 2019 trended forward

Physician spending is weighted 30% of total trend according to Milliman. In 4Q23, physician volumes are tracking +0.5% y/y. Although, that is +17.2% above 2019 levels and +8.3% above 2019 levels if trended forward by the LT growth rate (+2.2%).

On a PMPM basis, Q4 outpatient volumes were down -1.7% y/y but +10.8% above 2019 levels and +1.9% above 2019 trended forward.

Exhibit 18: Physician trend up +0.5% y/y in Q4
BofA Composite Healthcare Utilization Indicator – Physician Trend component vs 2019 baseline



Source: CDC, IQVIA, BofA Global Research

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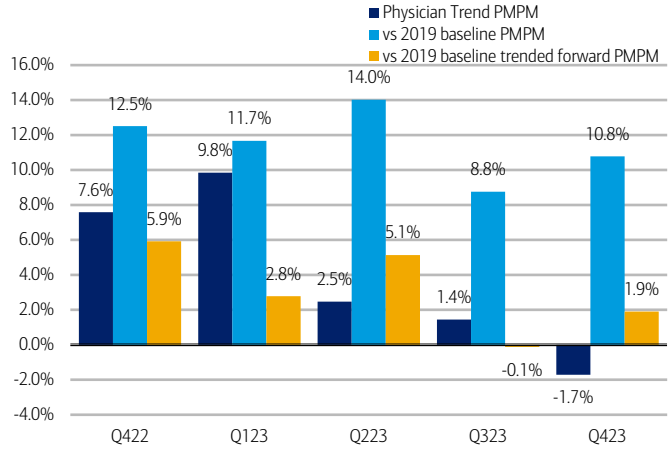
Exhibit 19: PMPM physician trend down -1.7% y/y in Q4
BofA Composite Healthcare Utilization Indicator – Physician Trend component PMPM vs 2019 baseline



Source: CDC, IQVIA, BofA Global Research

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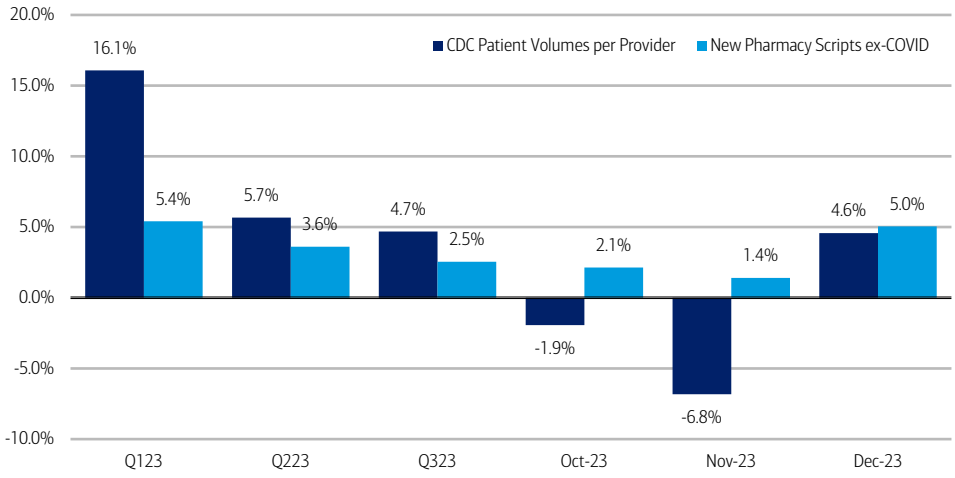
Looking at the y/y growth on a m/m basis, in December, physician utilization accelerated driven by both accelerating patient volumes per provider and accelerating new pharmacy scripts ex-COVID.

Exhibit 20: Physician trend data accelerated in December
Breaking down the components of physician trend calculation by monthly inputs



Source: CDC, IQVIA, BofA Global Research

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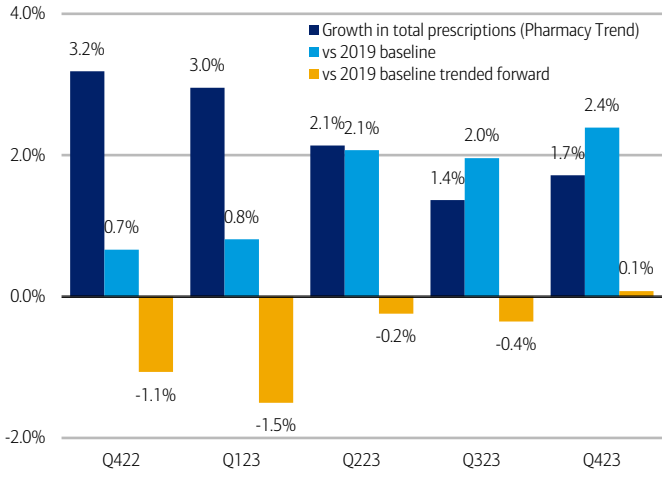
Pharmacy below 2019 on a PMPM basis

Pharmacy spending is weighted at 22% of total trend according to Milliman. In Q4, pharmacy volumes are tracking +1.7% y/y, which is +2.4% above 2019 levels. Meanwhile, that is +0.1% above 2019 levels if trended forward by the LT growth rate (+0.6%).

PMPM pharmacy volumes were down -0.5% y/y in Q4, which is -4.0% below 2019 levels and -6.3% below 2019 trended forward.

Exhibit 21: Pharmacy trend above 2019 base
BofA Composite Healthcare Utilization Indicator – Pharmacy Trend component vs 2019 baseline



Source: IQVIA, BofA Global Research

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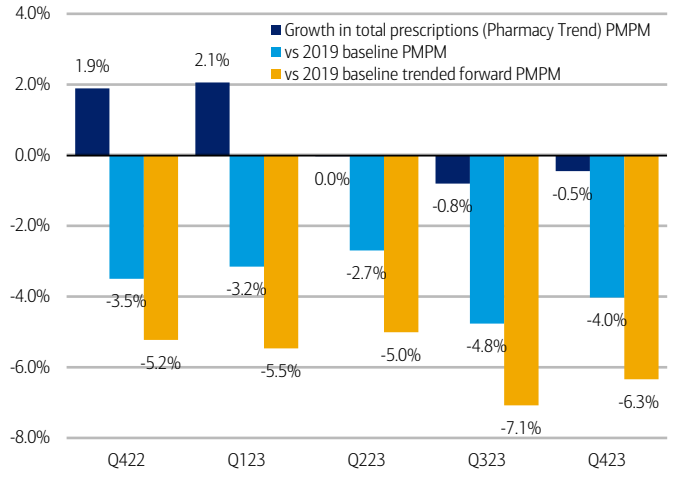
Exhibit 22: PMPM pharmacy trend below 2019 base
BofA Composite Healthcare Utilization Indicator – Pharmacy Trend component PMPM vs 2019 baseline



Source: IQVIA, BofA Global Research

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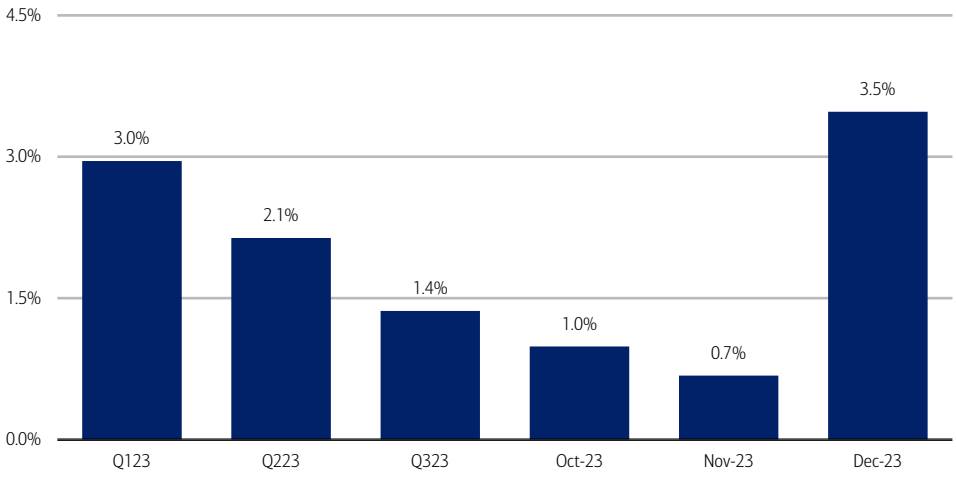
Looking at the y/y growth on a m/m basis, pharmacy utilization accelerated in December.

Exhibit 23: Pharmacy trend accelerated in December
Breaking down the progression of pharmacy trend calculation by monthly inputs



Source: IQVIA, BofA Global Research

BofA GLOBAL RESEARCH

Methods, historical results, limitations

Managed care companies almost always include MLR assumptions as part of their guidance, and how that metric tracks throughout the year vs initial expectations is often the single largest driver of financial performance. Within MLR changes y/y are a number of factors including **1)** Premiums, **2)** Underlying margin targets, **3)** Benefit designs, **4)** Provider/drug unit cost changes, **5)** Product mix shifts, **6)** Reserve assumptions, and **7)** Underlying utilization of healthcare services**.** Across all of these MLR components, most of the factors can be either be entirely controlled by or known by MCOs ahead of time, with the notable exception of underlying utilization. Therefore, the biggest delta vs initial expectations (and therefore financial performance) generally stems from unexpected changes to utilization, which has been even more difficult for MCOs to forecast since the onset of COVID. For more background information on cost trend in the commercial, Medicare, and Medicaid businesses, including how companies price, and historical trend by product, please see our 12th annual MCO primer.

First, we calculate volume trends by component

As described above and highlighted throughout this report, we track 4 major buckets of trend. Below we walk through exactly how each of those metrics is calculated, and break out our most recent calculations for greater transparency.

Inpatient & Outpatient Trend: We follow largely the same approach for inpatient and outpatient trend. First, we average the reported y/y growth in volumes across the four publicly traded hospitals (CYH, HCA, THC & UHS). For the upcoming fiscal quarter (but current calendar quarter) we would not yet have reported data for these companies as financial reporting happens on a lag, therefore we use a 'forecasted' average that is calculated from the prior quarter's y/y growth and q/q change in the average of the other three or four data inputs (highlighted in red). We do this to smooth the data because all of our historical data include public hospital volumes, is necessary for apples-apples comparison. Then we pull data from our proprietary BofA Hospital Volume Survey of 50 hospitals and Kaufman Hall's National Hospital Flash Report which tracks volume data from more than 1,300 hospitals, and Stratadecision's Stratasphere data which tracks volume data for 400+ hospitals. For inpatient, we include one additional data source from HHS's inpatient hospital occupancy data which includes every CMS registered hospital to track changes in hospital occupancy levels. Finally, we take a simple average for all y/y changes reported across all our data sources for the quarter. If data is not available (such as in the first month of the quarter) we show the linear change in each reported component of trend and subtract it from the previous month.

Physician Trend: To calculate Physician trend or volume growth we utilize data from more than two billion in annual Rx scripts tracked by IQVIA's Nrx volumes (y/y change in new prescriptions), adjusting out COVID vaccines which patients can get without seeing a doctor first. We use new script data as a proxy for physicians visits since patients generally need to see a physicians to get written a new prescription (while total prescriptions include refills that may not need a doctor visit). Additionally, we blend per/provider volume data (closest we can get to 'same store') from the CDC's 3,000+ Sentinel providers, which captured more than 90 million patient visits in 2021. Finally, we take a simple average for all y/y changes reported across all of our data sources for the quarter. If data is not available (such as in the first month of the quarter) we show the linear change in each reported component of trend and subtract it from the previous month.

Pharmacy Trend: To calculate pharmacy trend or script volume growth we utilize data from more than four billion in annual Rx scripts tracked by IQVIA's Trx volumes (y/y change in total prescription volumes) adjusting out COVID vaccines (non-core scripts and a discreet cost that MCOs likely priced for). IQVIA is a widely followed and reputable data source within the pharmacy industry, and therefore we do not blend it with any other sources.

Other: We note that for the 'other' bucket which represents just 2% of spending, we simply average the trend calculated for the 4 major trend buckets.

We note that if a metric isn't available at the time of the report, we compare the y/y change in metrics that we do have and then apply that sequential change in the growth rate to last quarter's absolute trend estimate to determine the growth rate in the current quarter.

Exhibit 24: Breaking out the calculation of each trend component by data source inputs
Below we break out all of the data sources we use to calculate overall cost trend, for each we take a simple average of all our respective inputs

Calculating buckets of trend					
Inputs & trend by component	**4Q22**	**1Q23**	**2Q23**	**3Q23**	**4Q23**
Public hospital average y/y change in inpatient volumes (CYH, HCA, THC, UHS)	*2.0%*	*5.2%*	*4.3%*	*3.5%*	*3.3%*
BofA's Hospital Volume Survey y/y change in inpatient volumes	*1.7%*	*2.6%*	*2.3%*	*2.3%*	*2.2%*
HHS reported y/y change in inpatient occupancy levels	*0.6%*	*0.3%*	*-0.5%*	*-1.6%*	*-1.5%*
Kaufman Hall's National Hospital Flash Report y/y change in inpatient admissions volumes	*-1.3%*	*4.3%*	*4.0%*	*2.7%*	*4.0%*
Stratadecision StrataSphere data y/y change in inpatient admissions volumes	*3.0%*	*6.4%*	*4.8%*	*4.2%*	*4.0%*
Inpatient Trend (average)	**1.2%**	**3.7%**	**3.0%**	**2.2%**	**2.4%**
Public hospital average y/y implied change in outpatient volumes (CYH, HCA, THC, UHS)	*6.4%*	*13.9%*	*6.5%*	*5.1%*	*5.2%*
BofA's Hospital Volume Survey y/y change in outpatient volumes	*2.7%*	*3.5%*	*4.0%*	*4.0%*	*4.1%*
Kaufman Hall's National Hospital Flash Report y/y implied change in outpatient volumes	*8.3%*	*17.3%*	*8.4%*	*7.0%*	*9.6%*
Stratadecision StrataSphere data y/y implied change in outpatient volumes	*-6.4%*	*0.7%*	*2.5%*	*1.5%*	*4.2%*
Outpatient trend (average)	**2.8%**	**8.8%**	**5.3%**	**4.4%**	**5.8%**
IQVIA y/y change in new prescription volumes or Nrx	*5.5%*	*5.4%*	*3.6%*	*2.5%*	*2.9%*
CDC's ILI network reported y/y change in patient visits per provider	*12.2%*	*16.1%*	*5.7%*	*4.7%*	*-1.9%*
Physician Trend (average)	**8.9%**	**10.7%**	**4.6%**	**3.6%**	**0.5%**
Pharmacy Trend (IQVIA y/y change in total prescription volumes or Trx)	**3.2%**	**3.0%**	**2.1%**	**1.4%**	**1.7%**
Other (average of 4 other components)	**4.0%**	**6.6%**	**3.8%**	**2.9%**	**2.6%**

Source: HHS, CDC, Guidepoint, Company Filings, Kaufman Hall's National Hospital Flash Report, IQVIA, Milliman, BofA Global Research

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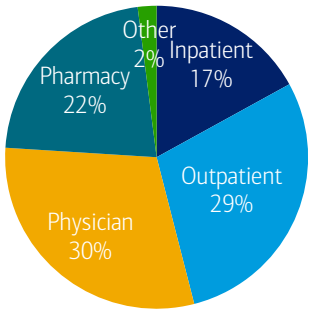
Next, we weight the importance of each component

Calculating the changes in nationwide healthcare volumes can be daunting, so we have taken a more top-down approach. Conveniently, Milliman has categorized total U.S. healthcare spending into 5 major buckets: Inpatient, Outpatient, Physician, and Pharmacy and other, which we calculated in the section above.

Exhibit 25: Physician, Outpatient, Pharmacy, and Inpatient services are the core cost components…
2023 Milliman cost index by bucket of spending



Source: Milliman Medical Index

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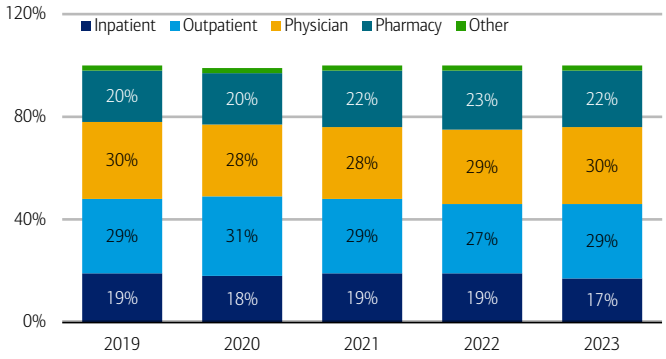
Exhibit 26: …have remained relatively stable in recent years
Milliman cost index by bucket of spending over time



Source: Milliman Medical Index

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After estimating the average trend by component, we weight the amounts by Milliman's index weightings to arrive at an overall estimate of Composite Healthcare Utilization Trend.

Exhibit 27: Weighting each of the components gives us our estimate for overall cost trend
Breaking down the calculation of overall cost trend, we sumproduct the arrays for each quarter

Estimated Trend by component	4Q22	1Q23	2Q23	3Q23	4Q23
Inpatient Trend	1.2%	3.7%	3.0%	2.2%	2.4%
Outpatient trend	2.8%	8.8%	5.3%	4.4%	5.8%
Physician Trend	8.9%	10.7%	4.6%	3.6%	0.5%
Pharmacy Trend	3.2%	3.0%	2.1%	1.4%	1.7%
Other	4.0%	6.6%	3.8%	2.9%	2.6%
Milliman Weightings					
Inpatient Facility Care	19%	17%	17%	17%	17%
Outpatient Facility Care	27%	29%	29%	29%	29%
Professional Services (Physicians)	29%	30%	30%	30%	30%
Pharmacy	23%	22%	22%	22%	22%
Other	2%	2%	2%	2%	2%
Cost Trend (sumproduct of above two arrays)	**4.4%**	**7.2%**	**4.0%**	**3.1%**	**2.6%**

Source: HHS, CDC, Guidepoint, Company Filings, Kaufman Hall's National Hospital Flash Report, IQVIA, Milliman, BofA Global Research

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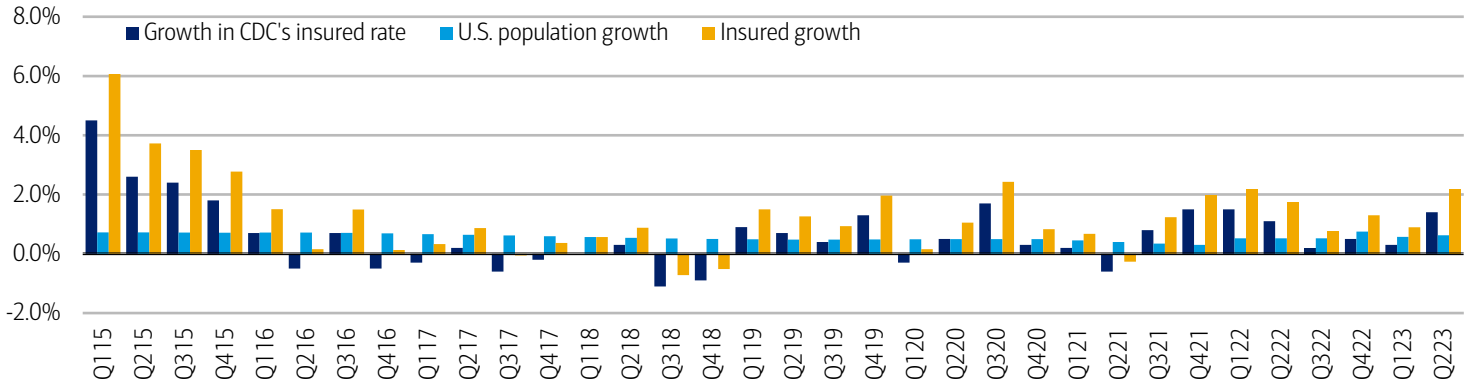
Finally, we adjust our forecast to be 'same store'

All of the metrics we refer to within this report are aggregating overall changes in volumes. By definition, these metrics have an upward bias because it includes population growth (1% long-term annual growth) as well as increases/decreases to the insured rate, which can vary based on the economy and government regulation (eg the surge after the Affordable Care Act created the exchanges and expanded Medicaid or more recently the increased subsidies to purchase coverage through the American Rescue Plan Act). In contrast, when managed care companies forecast MLR or utilization, they are referring to the 'same store' utilization trend for a constant membership base.

Exhibit 28: Insured population has historically surged from introduction of new government programs, supported by population growth
Forecasting quarterly changes to insured population



Source: CDC, Federal Reserve, BofA Global, Research

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After weighting all our utilization components by the Milliman index, we make one last adjustment for the growth or decline in the total insured population. We do this by taking the CDC's % of uninsured estimate in each quarter and overlay it on the Federal Reserve's seasonally adjusted quarterly population estimate. We note however that the CDC's uninsured % has a couple quarters of lag, which we hold constant in-between reports (highlighted in red).

Exhibit 29: We make one final 'same store' adjustment to our forecast, changes in the insured population
Bridging between Cost Trend estimate and PMPM Cost Trend accounts for changes in the number of insured beneficiaries

	4Q22	1Q23	2Q23	3Q23	4Q23
Cost Trend	4.4%	7.2%	4.0%	3.1%	2.6%
CDC reported insured rate	91.7%	92.3%	92.8%		
Federal Reserve reported US Population	334,282	334,641	335,019		
Implied # of insured beneficiaries					
y/y change in number of insured beneficiaries	1.3%	0.9%	2.2%	2.2%	2.2%
PMPM Cost Trend (cost trend - change in insured beneficiaries)	3.1%	6.3%	1.8%	0.9%	0.5%

Source: CDC, Federal Reserve, BofA Global, Research

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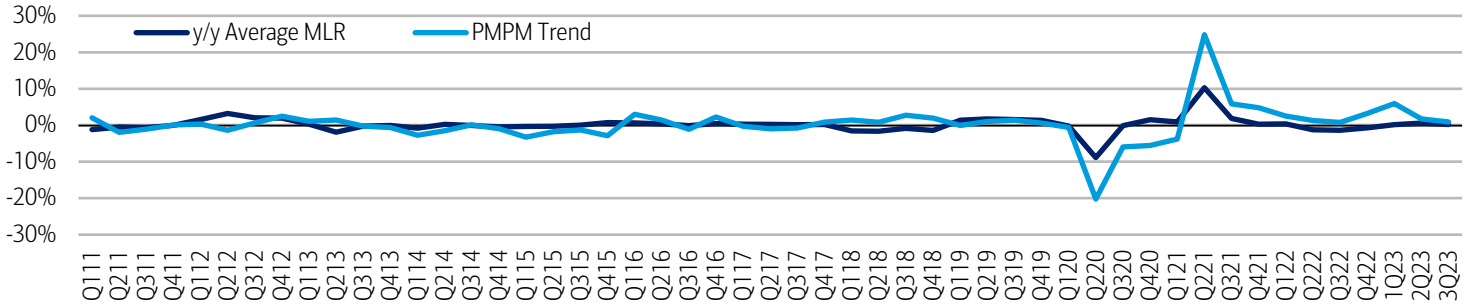
Changes in MLR directionally supportive of Indicator

There are several differences between our utilization indicator and actual utilization trend, so we do not intend for our indicator to match actual utilization on an absolute basis. However, we believe our indicator provides a good indication of utilization directionally, and we attempt to use it to determine inflection points. Looking back, we have seen y/y changes in our forecasted PMPM trend directionally supportive of changes in y/y average MLR reported across large carriers.

We note that the chart below compares two metrics: **1)** Average changes in y/y MLR reports across CI, CVS, ELV, MOH, HUM, UNH which is consistent in every period. **2)** BofA's PMPM Healthcare Utilization Tracker which has evolved in the number of inputs used over time. From 2011-2014 we only use data from the public hospitals, BofA Hospital Volume Survey and IQVIA to arrive at our trend averages (same methodology outlined above but with fewer inputs). For 2015 and onward we blend in per provider volume data from the CDC's Sentinel providers to calculate Physician trend. Finally, starting in 2020 and onward we add Kaufman Hall's National Hospital Flash Report and Stratadecision's Stratasphere volume data (which we only added as of our July 2023 report, but restated our composite trend going back to 2020 – as far back as the historical data is available) for both inpatient and outpatient trend; as well as HHS's occupancy data for inpatient trend.

Exhibit 30: We've seen a strong historical correlation in our trend tracker with MLR
BofA Composite PMPM Healthcare Utilization Trend vs. average y/y change in MLR



Source: BofA Global Research, Visible Alpha

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Limitations of this report

As we touch on at the beginning of this section, forecasting trend is only one component of MLR and therefore the methodology in this report cannot entirely be relied on to forecast that metric. For example, the Medical Loss ratio is calculated by taking medical costs/revenue, so it is a function of both costs and pricing. This report does not try to capture MCO pricing, which can cause quarterly variance, but since companies generally try to price their products to a consistent target MLR over time, pricing should normalize over longer periods of time. In addition, MLR at the company level can change over time based on mix shift (commercial has the lowest MLR, then Medicare Advantage and finally Medicaid). As government programs become a larger portion of the revenue, all else equal there should be an upward bias towards consolidated MLR, which may explain why MLR trends on average are slightly above our trend tracker.

Another limitation to be aware of is that essentially all of our data inputs are being compiled by third parties which may make their own adjustments to the data or sampling errors, though we feel as though averaging these metrics should normalize those impacts over time. Additionally, those data sources are subject to geographic biases which may only represent the trends of specific regions in the U.S. rather than at the national level, though again using multiple sources should help fight that bias. Finally, we look at how each component has trended vs the 2019 baseline if that baseline were to grow by the LT average of our tracker with the logic being that MCOs priced each year for normal volume changes. Therefore, there is a risk our LT averages are not correct, and that MCOs priced differently. However, we think illustrating this data is still helpful to give it more context.

Exhibit 31: Companies mentioned
Companies mentioned in this report

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
ELV	ELV US	Elevance Health Inc	US$ 471.84	B-1-7
HUM	HUM US	Humana Inc	US$ 409.65	B-1-7
PRVA	PRVA US	Privia Health	US$ 21.83	C-1-9
CI	CI US	The Cigna Group	US$ 305.03	B-1-7
UNH	UNH US	UnitedHealth Grp	US$ 512.99	B-1-7

Source: BofA Global Research

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Price objective basis & risk

Elevance Health Inc (ELV)
Our $580 PO is based on 15.7x our 2024E EPS, above the 5YR average of 14.3x, reflecting more diversified business mix, multiple levers to grow (commercial margins, growing services business) and favorable backdrop broadly for MCOs.

Risks to the downside are a quicker than expected rebound in utilization, a more competitive pricing environment, Medicaid redetermination impact on revenue/MLR and government rate pressure.

Risks to the upside are better-than-expected enrollment growth, upside from capital deployment, lower than expected utilization and faster than expected growth in the services businesses.

Humana Inc (HUM)
Our $520 PO is based on 17.1x our 2025 EPS estimate, in line with its 5-year average of 17.1x justified by the strong growth trajectory we expect for HUM's core business, Medicare Advantage.

Upside risks are potential for share repurchase and several non-healthcare catalysts, margin normalization, and the rebound in risk coding.

Downside risks are regular industry sensitivity points (cost trend, MA rates), as well as unknowns from a new administration.

Privia Health (PRVA)
Our $30 PO is based on 31x EV/EBITDA on our 2025 estimate which is a premium to where matured healthcare services peers are trading due to 2x higher EBITDA growth trajectory from higher organic growth and ramping margins, offset by higher execution risks.

This PO is also supported by a DCF on our 2023-2031 unlevered FCF estimates less stock compensation (to account for future investor dilution), applying an 'Exit Multiple' EBITDA multiple of 20x on 2032 EBITDA and a discount rate of 10%.

Downside risks: COVID-related volatility which can skew visibility into the margin trajectory, unforeseen regulatory changes, and potential pressure on revenue growth or pricing due to an increase in competition.

The Cigna Group (CI)
Our $370 PO is based on 13.1x our 2024 EPS estimate, a slight premium to the average NTM PE ratio since the ESRX deal closed (10x). We see this as justified as over the next few years we would expect an acceleration in commercial enrollment, PBM earnings (from biosimilars and CNC contract win), and rotation from growth stocks to value. All of these factors should lead to modest multiple expansion in the near term.

Upside risks to our PO are a faster than expected recovery from COVID, commercial/PBM market share gains and stronger than expected growth in government or high margin service oriented businesses. Additionally, there is potential upside from capital deployment.

Downside risks: Recessionary risks, market share losses, commercial MLR pressure, low visibility into growth.

UnitedHealth Group (UNH)
Our $675 price objective (PO) is based on a 2024E EPS multiple of 24.0x, a premium to UNH's five year historical average of 19.6x. This is justified, in our opinion, by the growing share of earnings coming from Optum as well as the significant growth potential of Optum, UNH's Health Care Services platform, which has higher margins and unregulated cash flow. Our PO is also supported by our sum-of-the-parts (SOTP) valuation.

Downside risks to our PO are that healthcare utilization rebounds faster than expected, that growth targets for Optum are not achieved, or that political/regulatory risk intensifies.

Analyst Certification

We, Kevin Fischbeck, CFA and Adam Ron, hereby certify that the views each of us has expressed in this research report accurately reflect each of our respective personal views about the subject securities and issuers. We also certify that no part of our respective compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

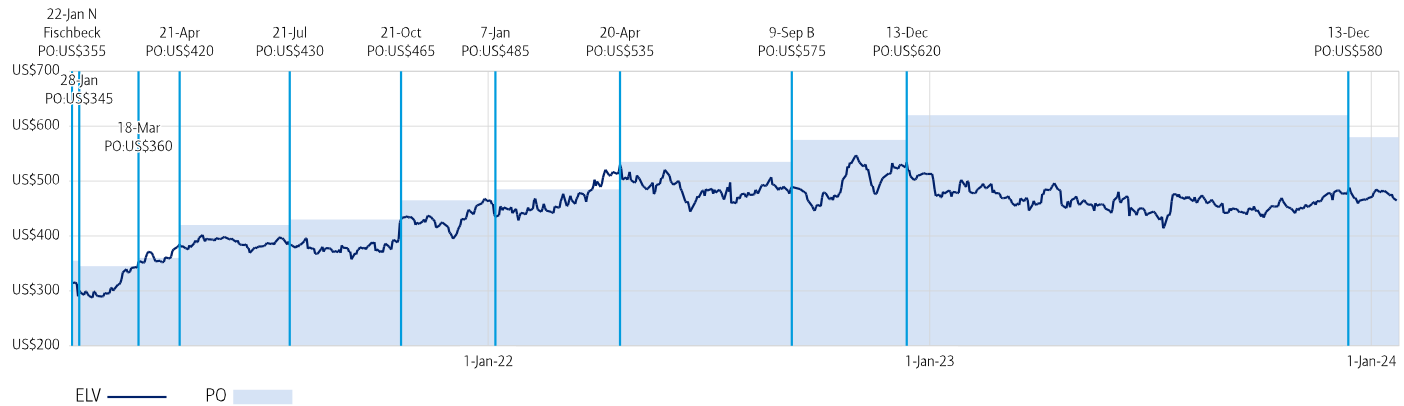
US - Facilities, Hospitals and Managed Healthcare Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Acadia Healthcare	ACHC	ACHC US	Kevin Fischbeck, CFA
	Addus HomeCare	ADUS	ADUS US	Joanna Gajuk
	Agilon Health	AGL	AGL US	Adam Ron
	Chemed Corporation	CHE	CHE US	Joanna Gajuk
	Elevance Health Inc	ELV	ELV US	Kevin Fischbeck, CFA
	Encompass Health	EHC	EHC US	Kevin Fischbeck, CFA
	HCA	HCA	HCA US	Kevin Fischbeck, CFA
	Humana Inc	HUM	HUM US	Kevin Fischbeck, CFA
	Option Care Health	OPCH	OPCH US	Joanna Gajuk
	Oscar Health	OSCR	OSCR US	Adam Ron
	Privia Health	PRVA	PRVA US	Adam Ron
	Select Medical Corp.	SEM	SEM US	Kevin Fischbeck, CFA
	Service Corp.	SCI	SCI US	Joanna Gajuk
	Surgery Partners, Inc	SGRY	SGRY US	Kevin Fischbeck, CFA
	Tenet Healthcare	THC	THC US	Kevin Fischbeck, CFA
	The Cigna Group	CI	CI US	Kevin Fischbeck, CFA
	UnitedHealth Group	UNH	UNH US	Kevin Fischbeck, CFA
	Universal Health Services	UHS	UHS US	Kevin Fischbeck, CFA
	US Physical Therapy	USPH	USPH US	Joanna Gajuk
NEUTRAL				
	Alignment Healthcare	ALHC	ALHC US	Adam Ron
	AMN Healthcare	AMN	AMN US	Kevin Fischbeck, CFA
	Apollo Medical	AMEH	AMEH US	Adam Ron
	Brookdale	BKD	BKD US	Joanna Gajuk
	Centene Corporation	CNC	CNC US	Kevin Fischbeck, CFA
	Molina Healthcare, Inc.	MOH	MOH US	Kevin Fischbeck, CFA
UNDERPERFORM				
	AdaptHealth Corp.	AHCO	AHCO US	Joanna Gajuk
	Agiliti Health Inc	AGTI	AGTI US	Kevin Fischbeck, CFA
	Cross Country Healthcare	CCRN	CCRN US	Kevin Fischbeck, CFA
	DaVita Inc	DVA	DVA US	Kevin Fischbeck, CFA
	Enhabit Home Health & Hospice	EHAB	EHAB US	Joanna Gajuk
	Pediatrix Medical Group, Inc.	MD	MD US	Kevin Fischbeck, CFA

Disclosures

Important Disclosures

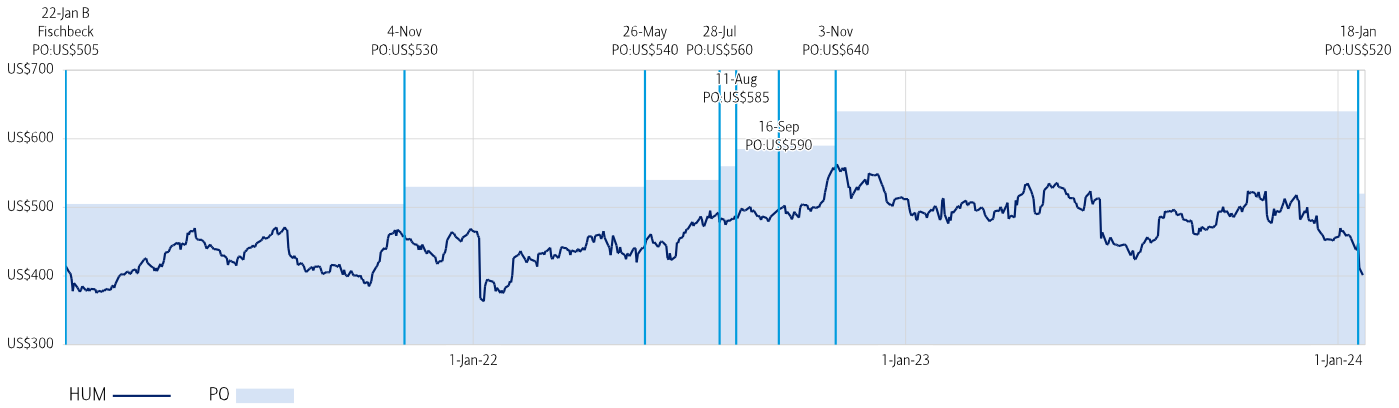
Elevance Health Inc (ELV) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

Humana Inc (HUM) Price Chart



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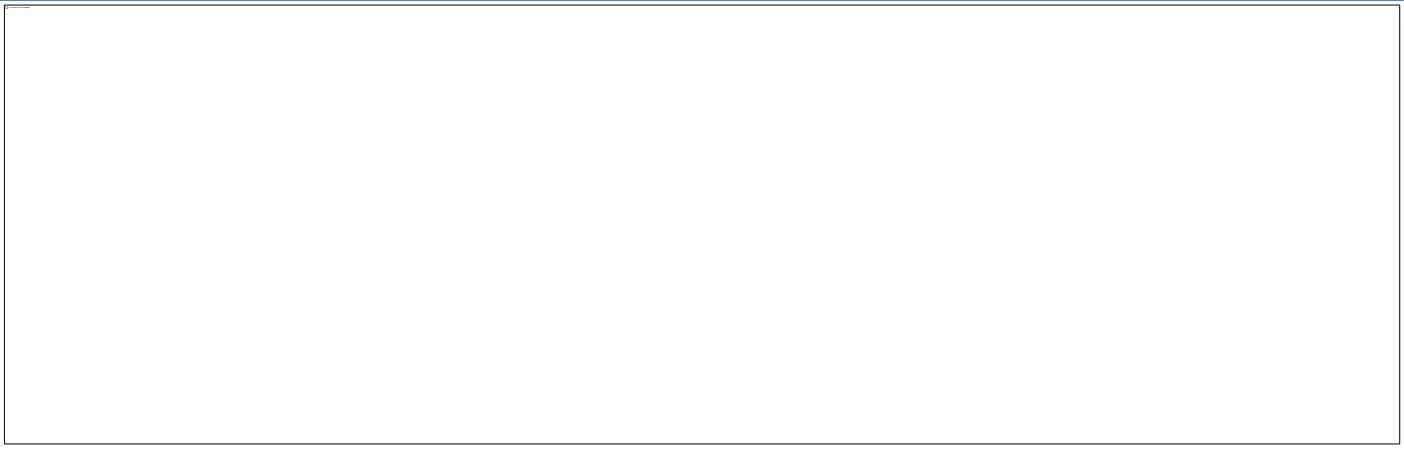
Privia Health (PRVA) Price Chart



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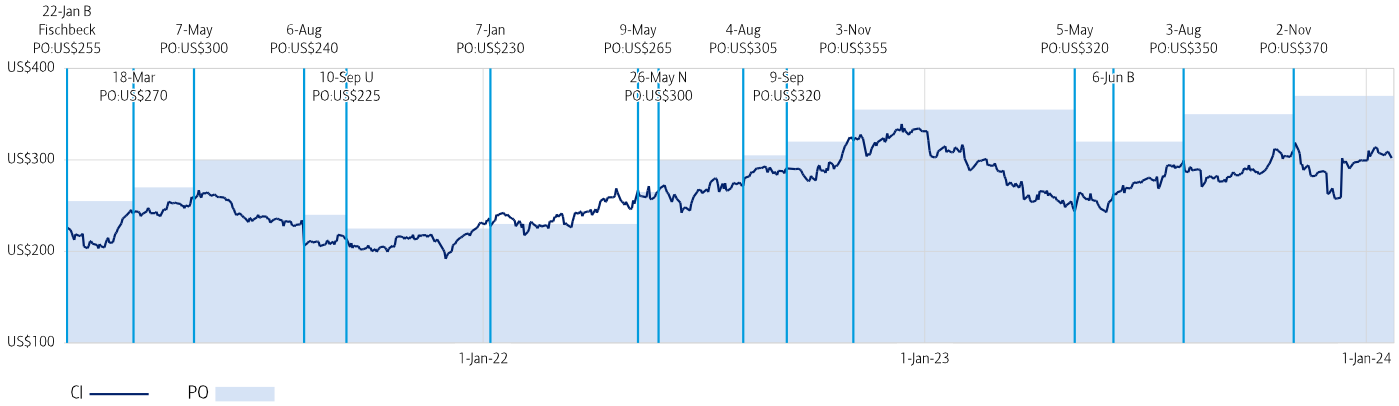
The Cigna Group (CI) Price Chart



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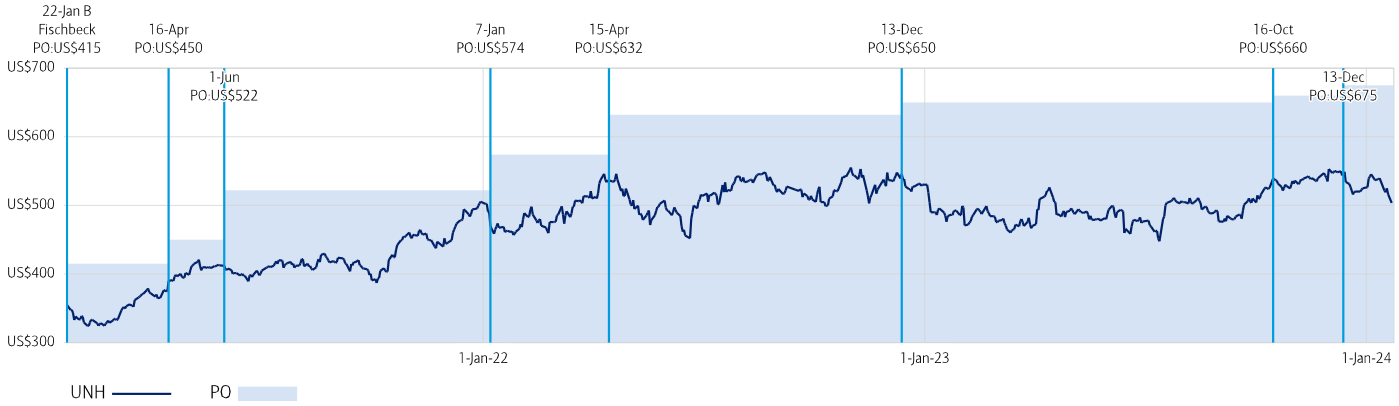
UnitedHealth Grp (UNH) Price Chart



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Equity Investment Rating Distribution: Health Care Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships [R1]	Count	Percent
Buy	234	60.94%	Buy	115	49.15%
Hold	80	20.83%	Hold	36	45.00%
Sell	70	18.23%	Sell	29	41.43%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships [R1]	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

[R1] Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster[R2]
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

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