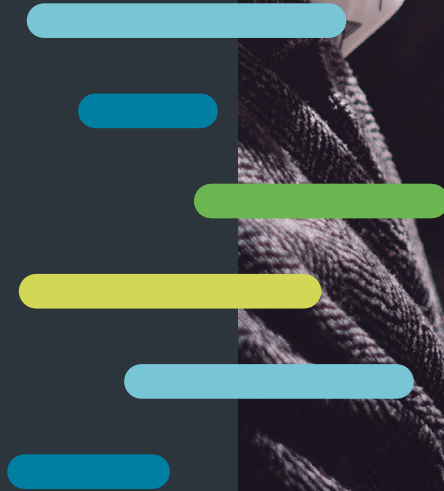




# Performance Trends Report

Market Analysis and  
Hospital & Patient Volume  
Benchmarks

First Quarter 2024



# Key findings from our latest data



**Steve Wasson**

Chief Data & Intelligence Officer  
Strata Decision Technology

The following report combines financial, operational, and claims data from hospitals, health systems, and other healthcare organizations across the country. Key findings include:



U.S. hospitals experienced up to a **17.9% shortfall in payment volumes** in the first quarter.

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Expansion of the Two-Midnight Rule governing how long patients can be kept in outpatient observation status could affect **more than 20%** of Medicare Advantage encounters in 2024.

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**Median hospital operating margins continue to stabilize**, with the metric holding above 4.5% throughout the first quarter as hospitals saw an 11<sup>th</sup> straight month of gross revenue growth.

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Year-over-year **growth in inpatient revenue exceeded outpatient revenue increases** for the first time since late 2021.

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The share of knee replacement surgeries performed on an outpatient basis **exceeded 80%** in Q1 2024, up from about 20% five years ago.

# Market Analysis



## Hospitals see drop in expected payments

Hospitals and health systems nationwide saw a sizable increase in delayed or missing payments in the first quarter. A recent, large-scale disruption to payment processing services contributed to the shortfall. Depending on the size of the hospital, estimated gaps in expected versus actual revenue ranged from 16.5% to 17.9% of payments for the first three months of 2024.

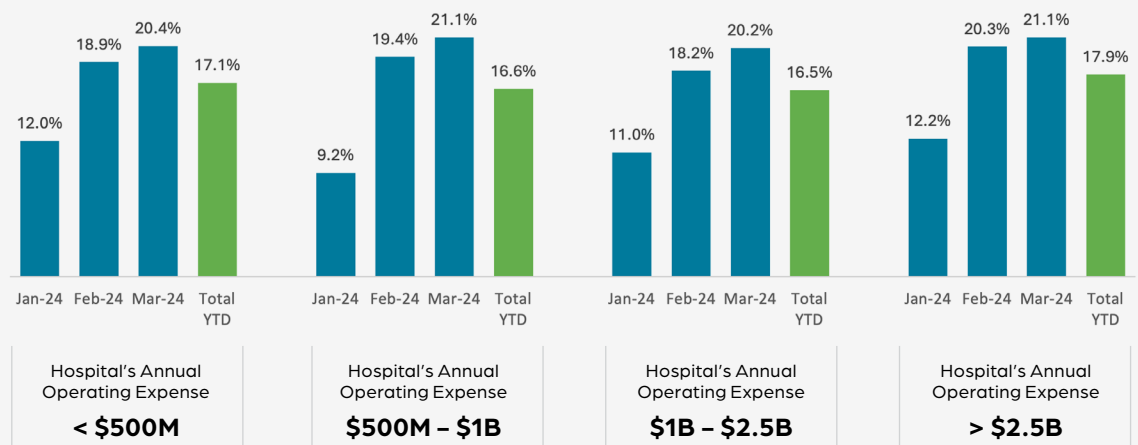
The largest hospitals with operating expenses of more than \$2.5 billion had the biggest percentage impacts. Given that payments can take weeks after the date of service to process, the shortfall for these hospitals started at 12.2% for services provided in January and rose to 20.3% in February and 21.1% in March for an average of 17.9% over the three-month period.

The smallest hospitals with less than \$500 million in annual operating expense had the second-highest percentage impact. This cohort had an average 17.1% shortfall for the quarter, with the gap swelling from 12% in January to 20.4% by March.

The analysis encompassed Medicare and commercial payments over the three-month period. The gaps in actual versus expected payments for Q1 2024 were based on a comparison to net to gross charges for the fourth quarter of 2023, minus actual payments received. Adjustments were applied to account for normal delays in claims processing for February and March.

Strata will continue to monitor the ongoing implications of missing payments on hospitals' financial performance in the coming months.

### Average Missing Share of Payments YTD



Source: StrataSphere® Data

# Two-Midnight Rule contributes to higher inpatient revenues

Effective in January, the Centers for Medicare and Medicaid Services (CMS) expanded its Two-Midnight Rule to include more than [30 million](#) people enrolled in Medicare Advantage managed care plans, which are run by private insurance companies. The rule requires patients to be admitted as an inpatient if the treating clinician determines they require hospital care that extends beyond two midnights, rather than being held under observation status as an outpatient.

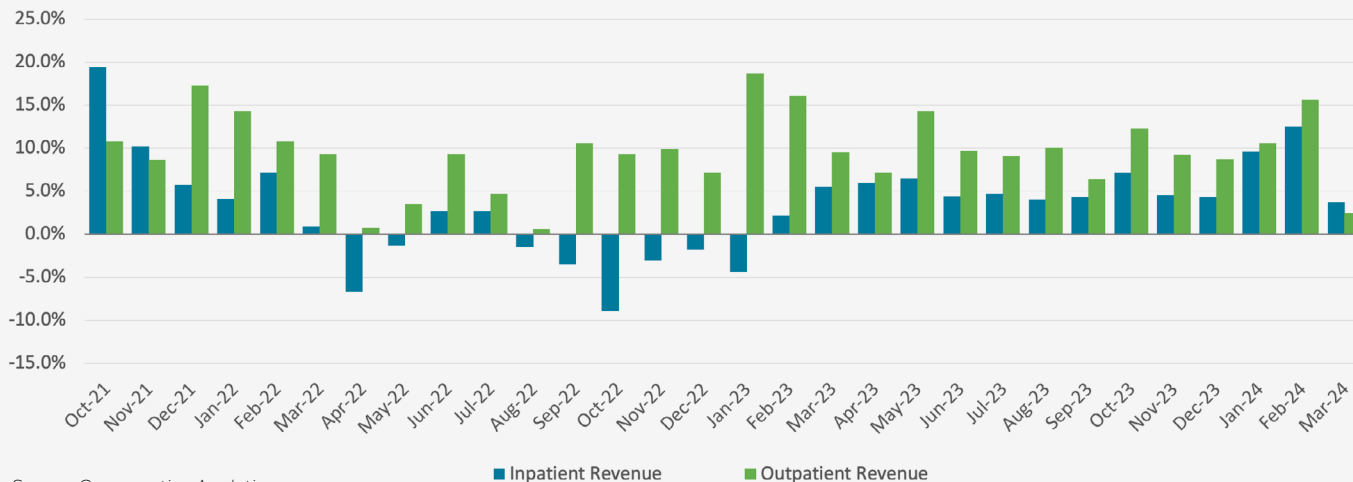
The rule could affect more than 20% of Medicare Advantage patients. An analysis of [StrataSphere data](#) Medicare Advantage encounters from 2023 – before the rule was expanded to those patients – found that 22.3% were held in observation status for two days or more. By comparison, 8.7% of Medicare patients and 11.3% of patients covered by commercial plans had observation lengths of stay of two days or more in 2023.

CMS initially implemented the [Two-Midnight Rule](#) for Medicare in 2013 to help remove barriers to patients receiving medically necessary care. Additionally, inpatient services have higher reimbursement levels compared to outpatient services.

January's expansion of the Two-Midnight Rule contributed to higher inpatient volumes and revenue growth in the first quarter. In March, inpatient admissions rose 3.9% year-over-year (YOY) while outpatient admissions decreased 5.1% YOY.

Looking at trends in hospital gross revenues, YOY growth in inpatient revenue surpassed outpatient revenue in March for the first time in more than two years. Inpatient revenue rose 3.7% versus March 2023, while outpatient revenue was up 2.4% YOY. The last time inpatient revenue growth outpaced outpatient revenue was November 2021, when inpatient revenue rose 10.2% YOY compared to 8.6% YOY for outpatient revenue. Outpatient revenue makes up about 47% of overall gross revenue.

### Year-Over-Year Growth in Inpatient and Outpatient Revenue, by Month



Source: Comparative Analytics

Medicare Advantage encounters  $\geq 2$  days in observation

**22.3%**

## A deeper look at the rise in outpatient demand

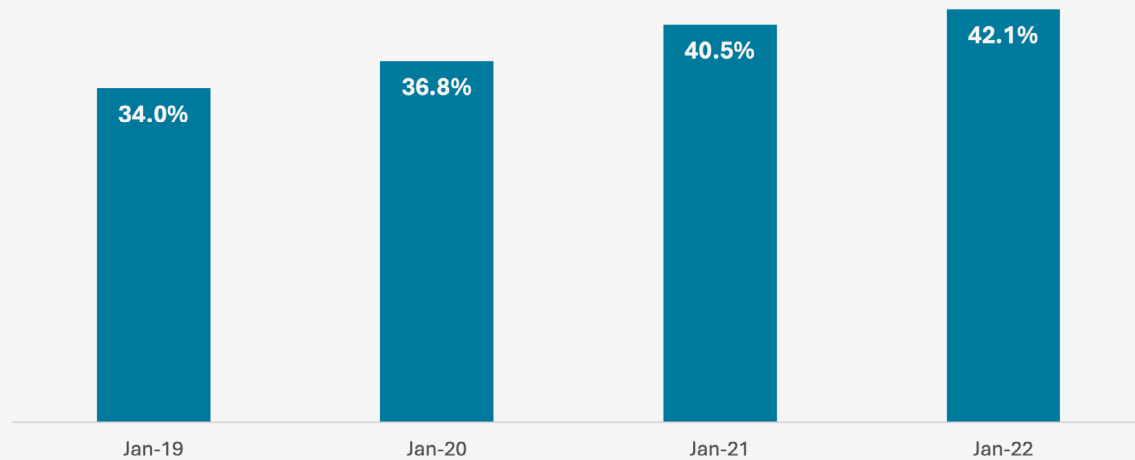
The fact that growth in outpatient revenue exceeded inpatient revenue for more than two years speaks to the significant rise in demand for outpatient services in recent years. Starting in 2019, CMS removed certain surgical procedures from its inpatient-only list, allowing them to be covered in outpatient surgical centers. The changes prompted other payers to follow suit and incentivized healthcare organizations to move certain surgical procedures traditionally performed on an inpatient basis to outpatient settings. As a result, the share of surgical procedures performed in outpatient settings grew from 34% in January 2019 to 45% in March 2024.

The shift was especially dramatic for certain high-volume procedures, such as hip and knee replacement surgeries. The share of hip replacement surgeries performed on an outpatient basis jumped from 1.2% in January 2019 to 60.4% as of March 2024. Knee replacement surgeries followed a similar trajectory, with the share of such surgeries performed on an outpatient basis rising from 20.1% in January 2019 to 80.7% in March 2024.



The share of surgical procedures performed on an outpatient basis rose from 34% in early 2019 to 45% by May 2024

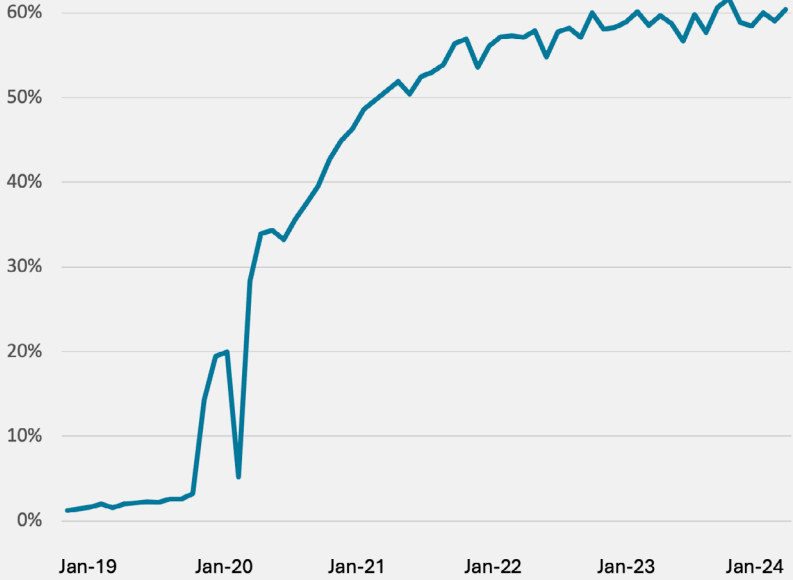
### Share of Surgical Procedures Performed Outpatient



Source: StrataSphere® Data

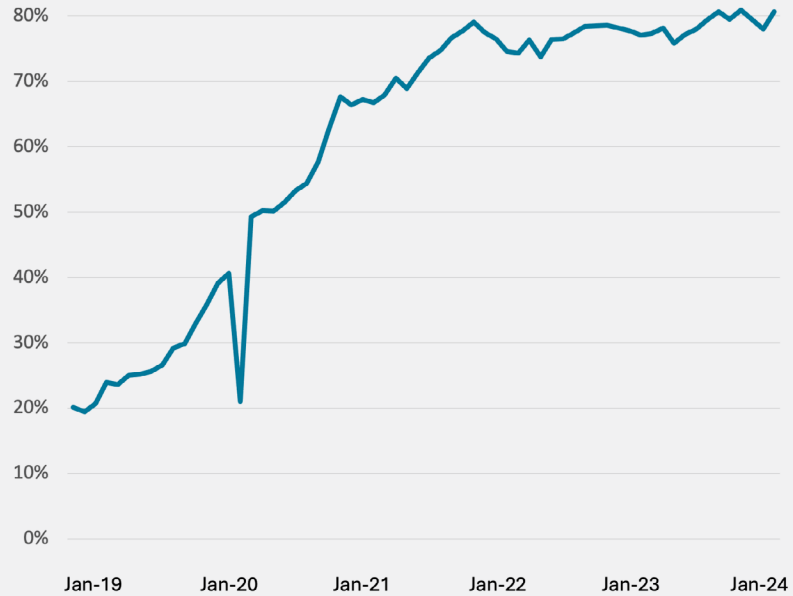
# A deeper look at the rise in outpatient demand continued

### Outpatient Share – Hip Arthroplasty



Source: StrataSphere® Data

### Outpatient Share – Knee Prosthesis



Source: StrataSphere® Data



# Hospital KPIs

MARCH 2024

The top financial KPIs for U.S. hospitals and health systems for March 2024 versus March 2023 are:

Operating Margin:

**-0.1**  
PERCENTAGE POINT

Total Expense:

**+2.7%**

Total Labor Expense:

**+3.5%**

Outpatient Revenue:

**+2.4%**

## Hospital operating margins continue to stabilize

Hospital operating margins showed strong performance throughout the first quarter as organizations continued to benefit from healthy revenue growth in 2024. The median year-to-date (YTD) operating margin was 4.7% for the month, down slightly from a peak of 5.2% in January but up significantly compared to margins of less than 1% in early 2023.

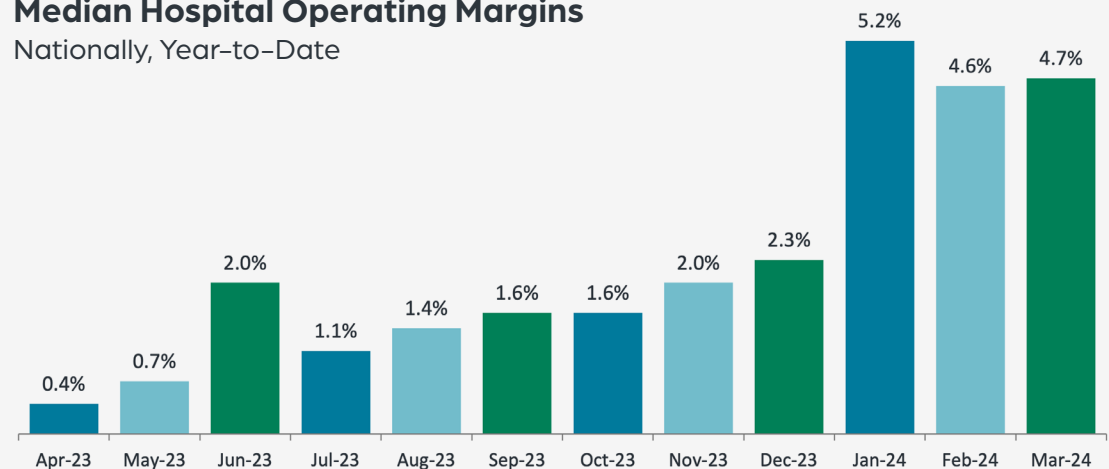
While overall, actual operating margin increased, the median change in the metric was nearly flat both YOY and month-over-month when looking at the national data. The median change in operating margin decreased 0.1 percentage point from March

2023 to March 2024, and was down 0.3 percentage point compared to February 2024. The median change in operating earnings before interest, taxes, depreciation, and amortization (EBITDA) margin decreased 0.4 percentage point YOY and 0.5 percentage point versus the prior month.

By region, the median change in operating margin varied significantly, with increases in two regions and decreases in three. Hospitals in the South had the biggest increase, with the metric up 1.5 percentage point YOY in March, while hospitals in the Great Plains had the biggest decrease with the metric down 2.9 percentage points YOY.

### Median Hospital Operating Margins

Nationally, Year-to-Date



Source: Comparative Analytics

## Labor expense growth surpasses non-labor

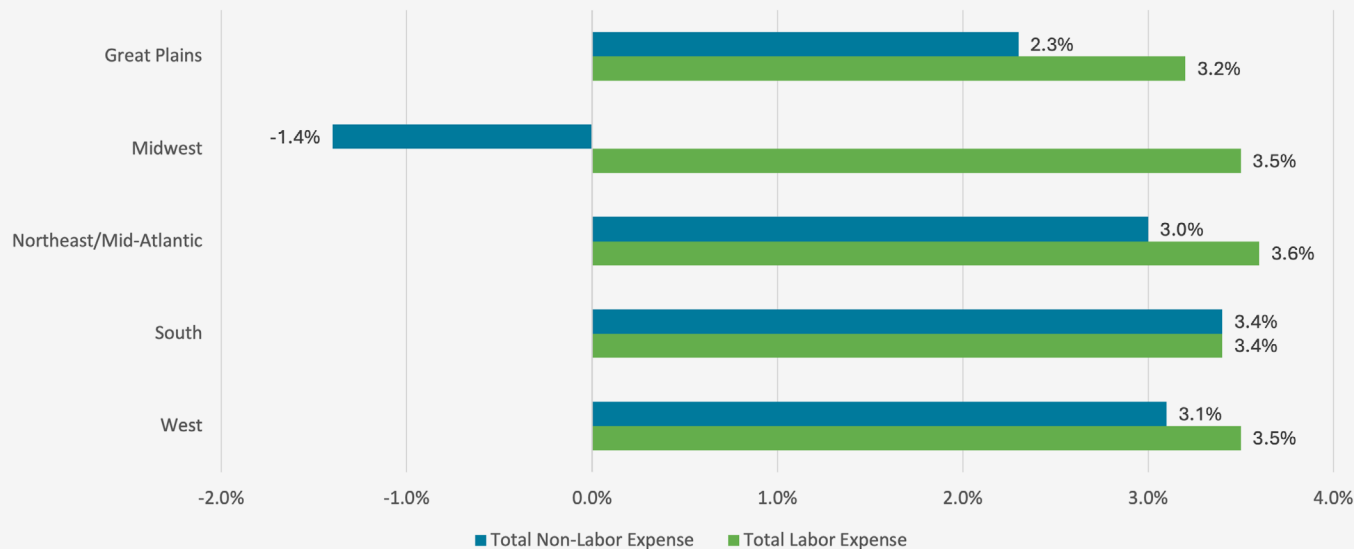
Overall hospital expenses continued to climb throughout the first quarter, but YOY growth in labor expense surpassed non-labor expense for the first time in 18 months. If this shift continues in future months, it could signal that the effects of inflation on non-labor expenses such as drugs and supplies may be easing.

Total labor expense rose 3.5% versus March 2023 and jumped 5.5% compared to February 2024, while total non-labor expense increased 2% YOY and just 0.4% month-over-month. Total expense rose 2.7% YOY

and 2.9% month-over-month. Supply expense was nearly flat, rising just 0.1% YOY while drugs expense decreased 2.8% over the same period, representing a reversal after both metrics saw double-digit YOY growth the month before.

Higher growth in labor versus non-labor expenses was consistent for hospitals in various regions. Hospitals in the Midwest, for example, had labor expense increase 3.5% YOY in March while non-labor expense decreased 1.4%.

**Total Labor and Total Non-Labor Expense Growth for U.S. Hospitals, by Region**  
March 2024 Year-Over-Year Change



Source: Comparative Analytics



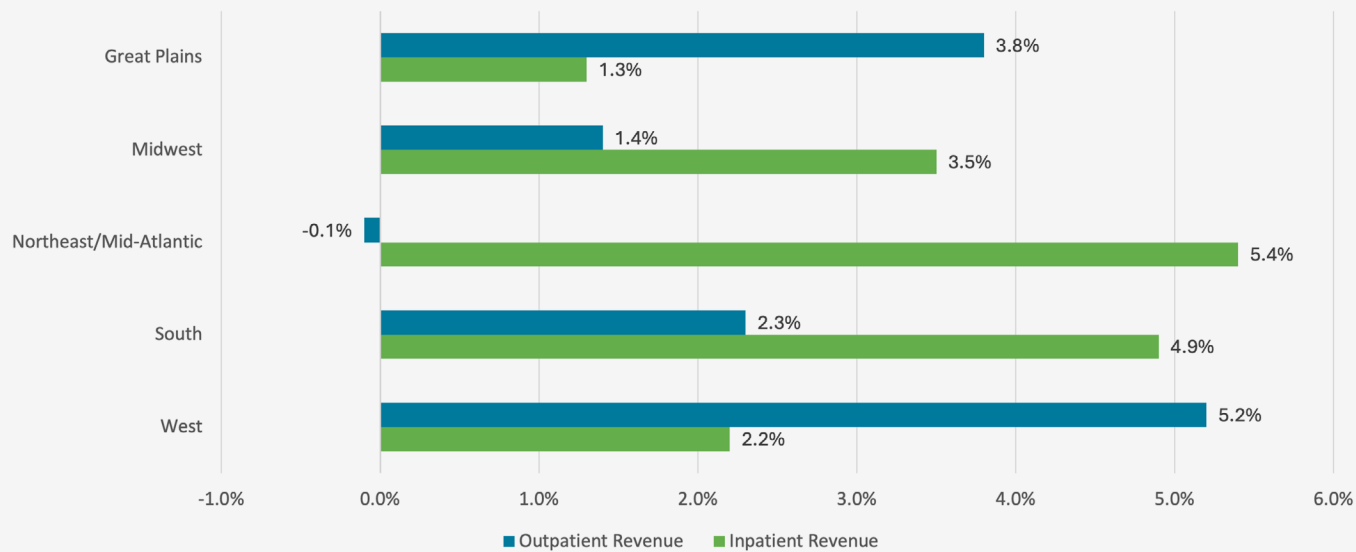
## Gross revenues rise for an 11<sup>th</sup> month

As discussed in the Market Analysis section, YOY growth in gross inpatient revenue outpaced outpatient revenue increases for the first time since late 2021. Inpatient revenue rose 3.7% versus March 2023 and 3.5% versus February 2024, while outpatient revenue was up 2.4% YOY and 1.2% month-over-month. Overall gross operating revenue increased 3.1% and 2.2% over the same periods, respectively. March marked the 11<sup>th</sup> consecutive month of YOY increases for all three metrics, which contributed to stronger margins in recent months.

Revenue growth varied widely for hospitals in different regions. For example, hospitals in the Northeast/Mid-Atlantic saw inpatient revenue jump 5.4% YOY in March while outpatient revenue was nearly flat, down just 0.1%.

Adjusted revenues increased YOY but were down month-over-month. Net patient service revenue (NPSR) per adjusted discharge increased 2.5% YOY and decreased 1.7% versus the previous month, while NPSR per adjusted patient day rose 4.9% from March 2023 to March 2024 and was down 0.5% from February to March 2024.

**Inpatient and Outpatient Revenue Growth for U.S. Hospitals, by Region**  
March 2024 Year-Over-Year Change



Source: Comparative Analytics

# Inpatient admissions rise faster than outpatient

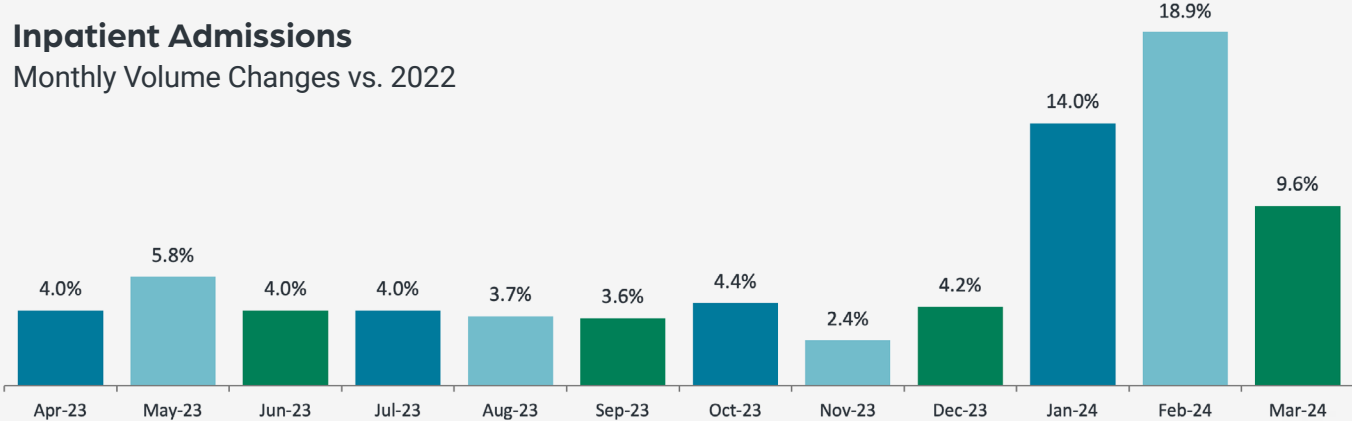
U.S. hospitals and health systems had mixed volume growth in March. Inpatient admissions rose while outpatient visits decreased, due in part to expansion of CMS' Two-Midnight Rule for Medicare Advantage patients, as discussed in the Market Analysis section. Inpatient admissions were up 3.9% YOY and 4.1% month-over-month, while outpatient visits dropped 5.1% YOY and were down 0.8% versus February 2024. Compared to 2022, inpatient admissions rose 9.6%.

Observation visits decreased 4.2% versus March 2023 but increased 1.8% from the prior month, while emergency department (ED) visits rose 2.6% YOY and 3.4% month-over-month.

Children's hospital volumes were down across most metrics YOY. Inpatient admissions decreased 1.3%, outpatient visits dropped 6.2%, and observation visits were down 1.3%. ED visits were an exception, with volumes up 1.3% from March 2023 to March 2024.

Looking at specific service lines, Infectious Disease had by far the biggest YOY volume growth with an increase of 35.6% versus March 2023. Contributing factors likely include higher instances of respiratory syncytial virus (RSV), COVID-19, influenza, and measles. Month-over-month, however, infectious disease volumes decreased 8.2%. By procedure, outpatient positron emission tomography (PET) imaging had the biggest YOY increase at 20.2%. The metric rose 4% month-over-month.

**Inpatient Admissions**  
Monthly Volume Changes vs. 2022



Source: StrataSphere Research Report: [National Patient and Procedure Volume Tracker™](#), Data as of March 31, 2024.

\*Note: The Leap Year contributed to the sizable increase in inpatient admissions in February 2024, which added an extra day of admissions compared to February 2022.

For more detailed data on recent patient volume trends, please see our latest issue of the [National Patient and Procedure Volume Tracker™](#).

For the latest financial performance data on U.S. hospitals and physician groups, please see our [Monthly Healthcare Industry Financial Benchmarks](#).



## About the data

This report uses data from Strata's Comparative Analytics solution, which offers access to near real-time data drawn from more than 135,000 physicians from over 10,000 practices and 139 specialty categories, and from 500+ unique departments across more than 1,600 hospitals. Comparative Analytics also provides data and comparisons specific to a single organization for visibility into how their market is evolving.

In addition, the report includes data from Strata's StrataSphere database. StrataSphere is a unique and comprehensive data-sharing platform that helps providers leverage the power of a network that represents approximately 25% of all provider spend in U.S. healthcare. The data presented in this report were pulled from the StrataSphere encounter data set, which aggregates hospital billing data from across the U.S. As such, all reported metrics are from the hospital setting, and encounters were categorized by patient type depending on the presence of particular UB revenue codes. Procedures were identified using the Sg2 CARE Grouper. Depending on the specific data requirements for each section, different hospital inclusion criteria were applied. In this report, 624 hospitals were included in the expected payments analysis, 456 hospitals were included in the Two-Midnight Rule analysis, 605 hospitals were included in the total share of surgical procedures performed outpatient analysis, and 473 hospitals were included in the specific hip and knee procedure analyses.



