



# Performance Trends Report

Market Analysis and  
Hospital & Patient Volume  
Benchmarks

Third Quarter 2024



# Key findings from our latest data



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



**Bariatric surgeries and associated hospital margins declined in recent years** as the use of weight loss medications has increased.

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**Hourly pay for hospital employees continues to rise** as organizations seek to recruit and retain qualified healthcare professionals, with year-over-year increases as high as 8.1% for select roles.

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**The median health system operating margin narrowed for a third consecutive month**, decreasing from a 12-month high of 2.3% in May and June to 1.6% in September.

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**Year-over-year growth in inpatient volumes outpaced outpatient volume increases** in September, but patient demand decreased across both metrics versus the prior month.

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**Sizable expense increases for purchased services, supplies, and drugs** contributed to a 6.3% rise in total non-labor expenses compared to the same month in 2023.

## Market Analysis



## Rates of bariatric surgeries and associated margins on the decline

The number of bariatric surgeries has decreased in recent years, coinciding with increased use of certain medications for chronic weight management.

The data show that the number of bariatric surgeries fluctuates from month to month. Rates tend to spike each year in December and then drop in January, likely due to individuals seeking to use their insurance deductibles before the start of a new year. Even with the fluctuations, bariatric surgeries have generally declined over the past few years, with monthly rates in both 2023 and 2024 falling below the prior years.

For example, the number of bariatric surgeries decreased more than 32% from 3,924 in August 2022 to 2,658 in August 2024, based on the latest data available from a sample of 809 hospitals nationwide. The analysis examined inpatient bariatric surgeries, because such surgeries are done primarily on an inpatient basis. As a proportion of all inpatient encounters, bariatric

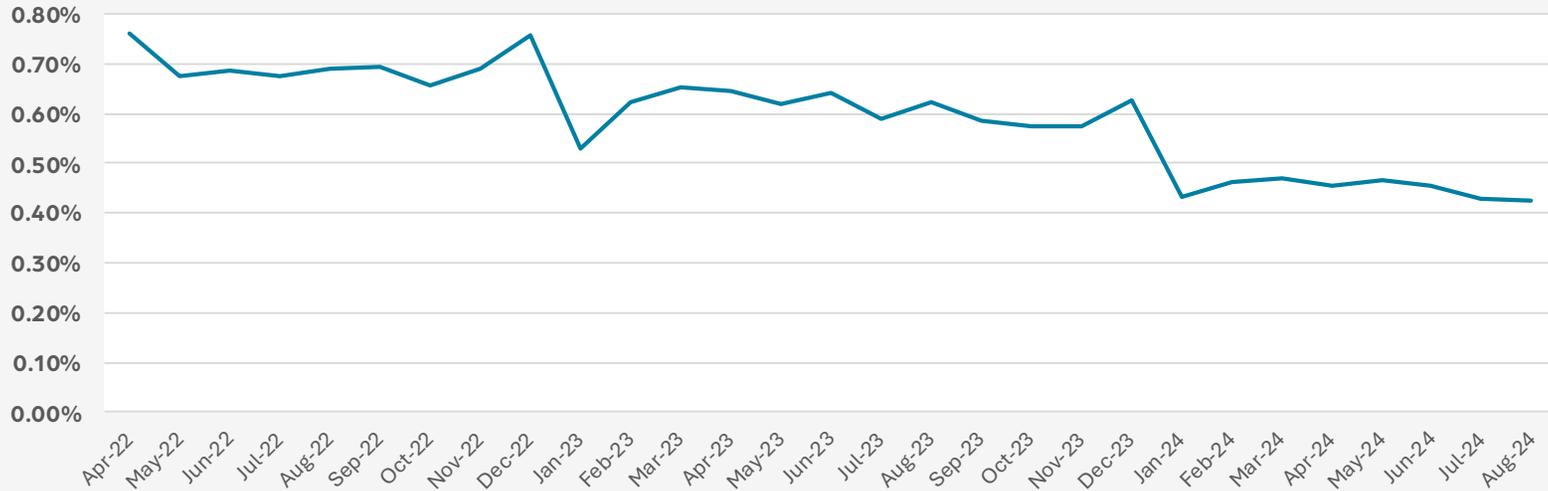
surgeries dropped from 0.69% in August 2022 to 0.43% in August 2024.

The general drop in bariatric surgeries corresponds with rising use of [semaglutide](#), which belongs to a class of medications known as glucagon-like peptide-1 receptor agonists (GLP-1 RAs). Such medications were initially approved to treat Type 2 Diabetes in [late 2017](#), and then to reduce cardiovascular risk for adults with Type 2 Diabetes and known heart disease in January 2020.

The Food and Drug Administration approved one brand of semaglutide for chronic weight management in adults in [June 2021](#), and expanded that approval to those ages 12 and older in [December 2022](#). The medication stimulates the body to produce more insulin, which reduces blood sugar. Semaglutide also has been shown to suppress appetite. The number of semaglutide prescriptions filled jumped more than 400% between January 2021 and December 2023, according to an August 2024 [JAMA study](#).

## Inpatient Bariatric Surgeries as a Proportion of Inpatient Surgeries

Hospitals Nationally – April 2022 to Aug. 2024



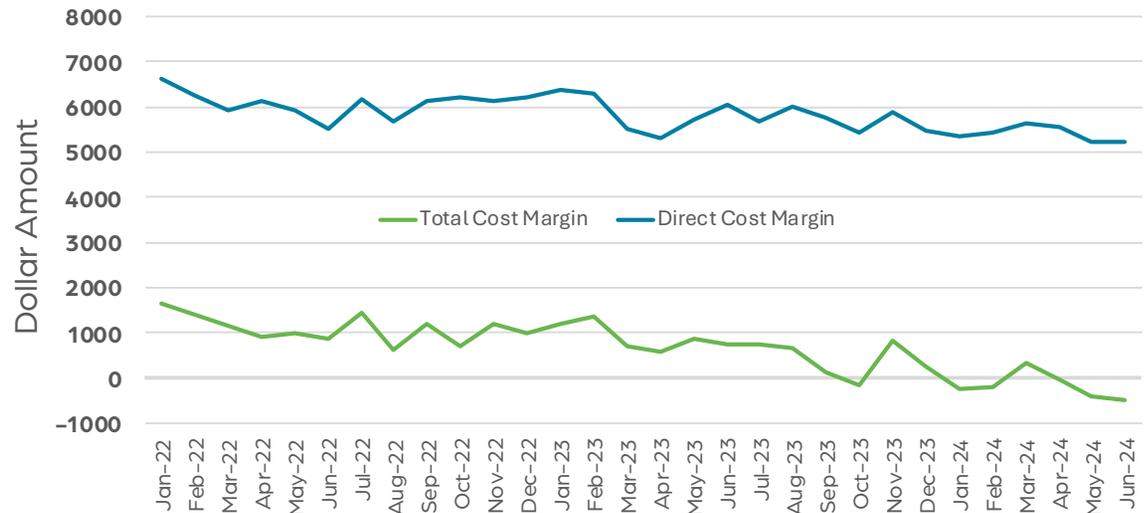
Source: StrataSphere® Data

Hospital margins for bariatric surgeries have declined as volumes of such procedures have decreased. The average total cost margin for bariatric surgeries decreased from \$1,651.63 per procedure in January 2021 to -\$504.83 as of the latest data from June 2024. Total cost margin is the median margin per procedure after accounting for all costs, including both direct patient care and overhead expenses.

The direct cost margin for bariatric surgeries decreased from \$6,642.76 per procedure in January 2021 to \$5,247.12 per procedure in June 2024. Direct cost margin incorporates only direct costs related to a procedure, exclusive of overhead expenses. The gap between the two metrics – equal to \$5,751.95 for June 2024 – reflects the impact of those overhead costs.

## Margins for Inpatient Bariatric Surgeries Declining

Hospitals Nationally – Jan. 2022 to June 2024



Source: StrataSphere® Data

# Higher wages and supply costs contribute to hospital expense pressures

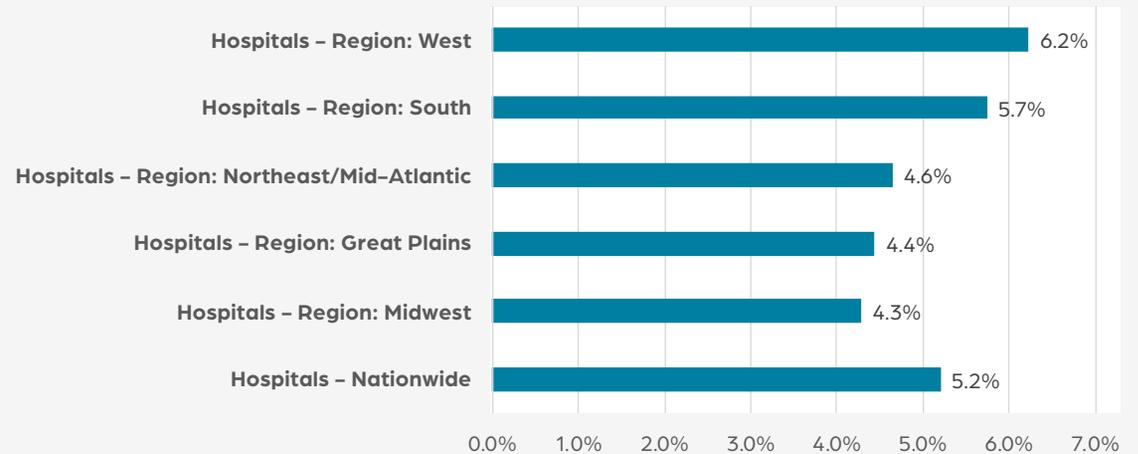
Hospitals nationwide continue to feel the effects of rising labor and non-labor costs. At a national level, total labor expense increased 5.2% year-over-year (YOY) in September. Increases in the metric varied for hospitals in different regions. Hospitals in the West had the biggest YOY increase at 6.2% from September 2023 to September 2024, while hospitals in the Midwest had the least increase at 4.3% over the same period.

Higher wages are one contributor to rising labor expenses, as hospitals have increased pay in efforts to recruit and retain qualified healthcare professionals. Compared to September 2023, the average hourly pay rate for hospital employees nationwide was up 1.6% in September 2024. Using September 2023 as a baseline, hourly hospital pay rates rose for eight of the first nine months of 2024. The biggest increase was in June, when the average hourly rate was up 1.9% compared to September 2023. The only exception was July, when the average hourly rate was unchanged compared to September 2023.



## Total Labor Expense

Year-over-Year % Change, Sept. 2024



Source: Comparative Analytics

## Average Rate / Hour (Percent Change)

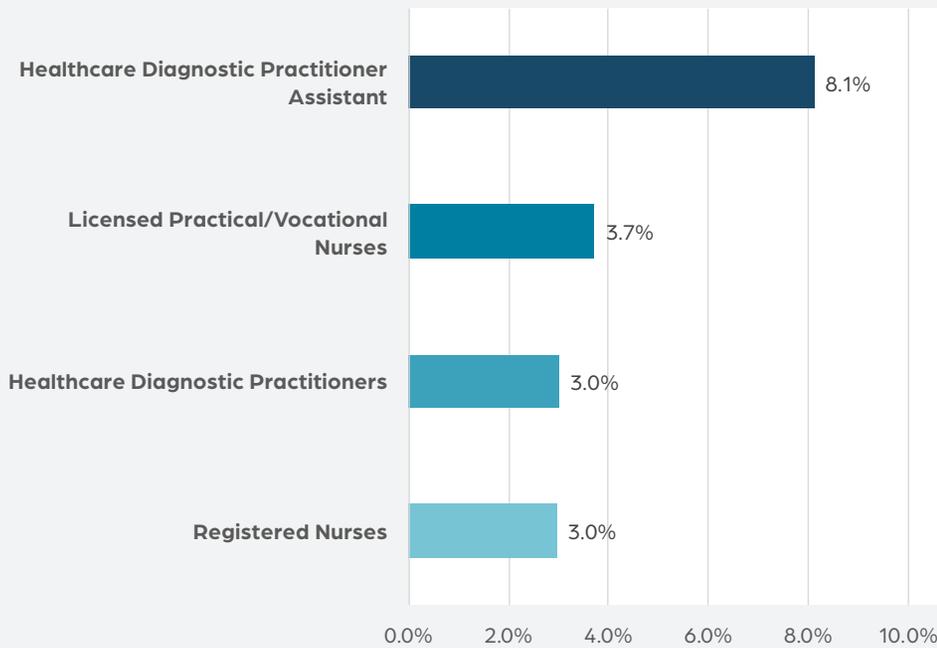
Hospitals Nationally - Indexed at Sept. 2023



Source: Comparative Analytics

## ICU Medical Hourly Rate

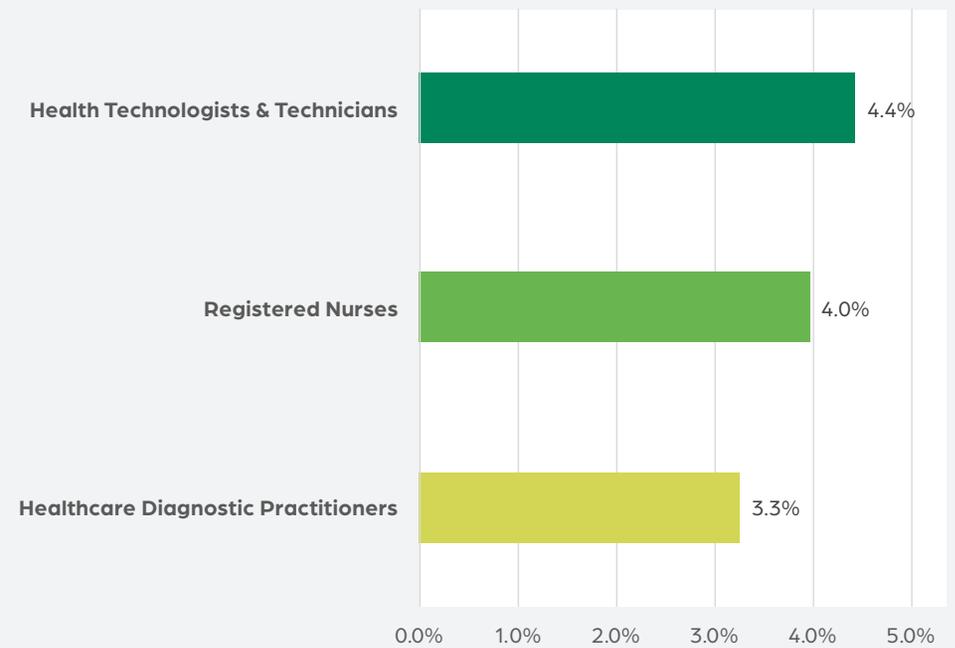
Hospitals Nationally – Sept. 2023 vs. Sept. 2024



Source: Comparative Analytics

## Surgery Operating Room Hourly Rate

Hospitals Nationally – Sept. 2023 vs. Sept. 2024



Source: Comparative Analytics

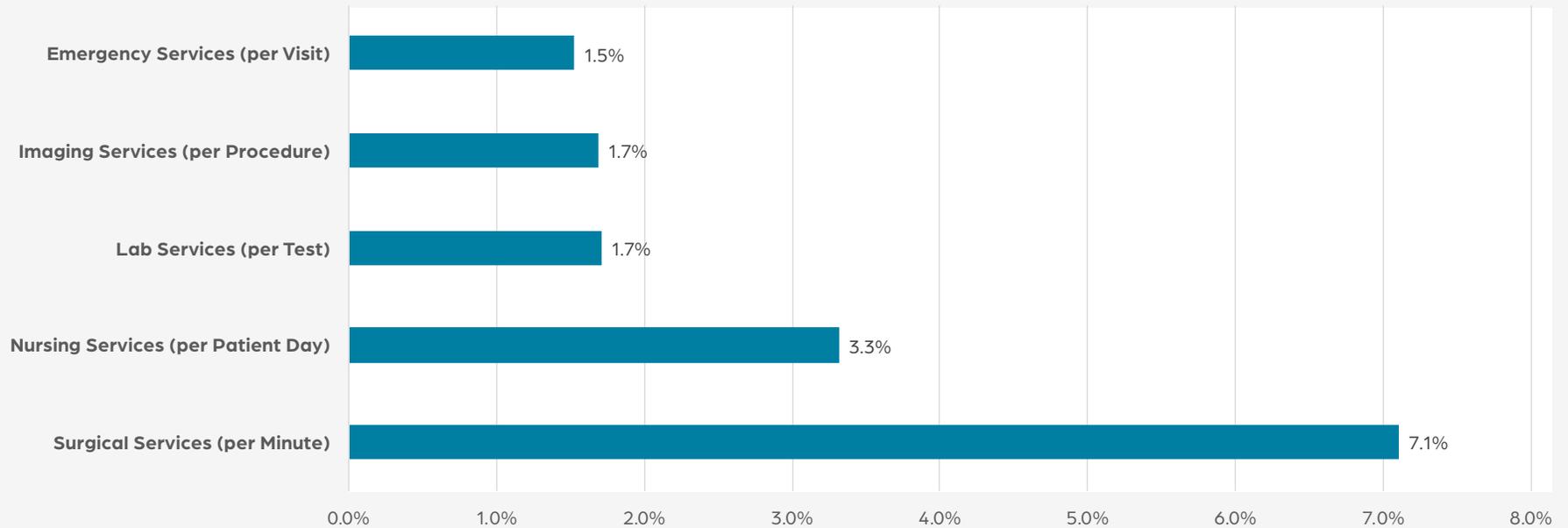
Additional analysis examined changes in hourly pay rates for a sampling of specific roles, further highlighting efforts to attract qualified employees to work in specialized areas. For clinicians working in intensive care units (ICUs), for example, the average YOY hourly rate increases ranged from 3% for both registered nurses and healthcare diagnostic practitioners, to an 8.1% jump for diagnostic practitioner assistants. For those working in operating rooms, the median hourly rate increased 3.3% for healthcare diagnostic practitioners, 4.0% for registered

nurses, and 4.4% for health technologists and technicians from September 2023 to September 2024.

Non-labor expenses also remain on the rise. Median total non-labor expense for hospitals nationwide increased 6.3% YOY in September, driven in part by an 8.6% YOY jump in total supply expense. Looking at such expenses on a per-patient basis, supply expense per adjusted discharge was up 5.3% YOY.

## Medical Supply Expense per Unit of Service

Hospitals Nationally – Sept. 2023 vs. Sept. 2024



Source: StrataSphere® Data

The cost of medical supplies also increased per unit of service. Surgical services saw the greatest increase, with medical supply expense per minute jumping 7.1% from September 2023 to September 2024. Medical supply expense per patient day for nursing services increased 3.3% over the same period, while both lab and imaging services saw medical supply expense per unit of service increase 1.7% YOY. Medical supply expense per visit for emergency services increased 1.5% YOY.



# Hospital KPIs

SEPTEMBER 2024

The top financial KPIs for U.S. hospitals for September 2024 versus September 2023 are:

Operating Margin:

**+2.1**  
PERCENTAGE POINTS

Outpatient visits:

**+3.8%**

Total expense:

**+5.9%**

Total non-labor expense:

**+6.3%**

Outpatient Revenue:

**+9.1%**

## Health system margins narrowed throughout Q3

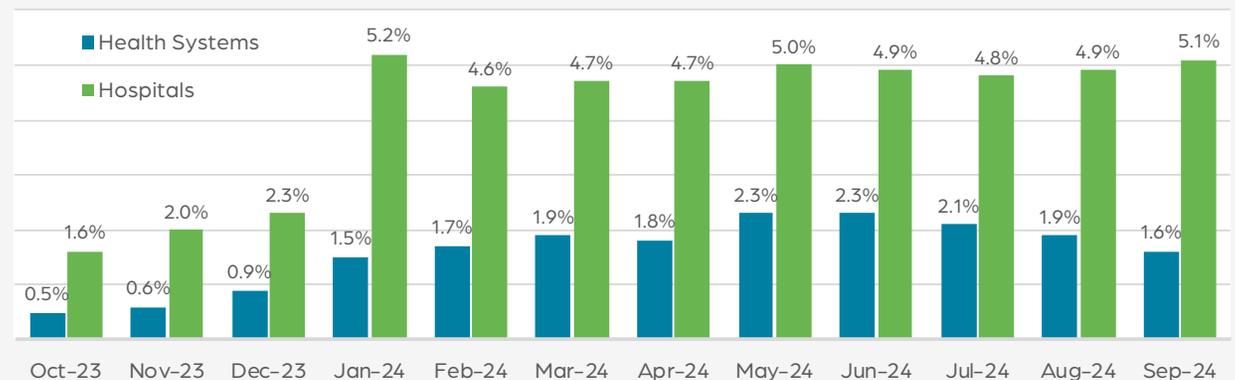
The median health system operating margin narrowed for a third consecutive month in September. The decline marked a full quarter of weakening performance for the metric as high expenses continued to pressure these organizations, which can encompass multiple entities and provider types, and therefore have more complex cost structures compared to individual hospitals. The median year-to-date (YTD) health system operating margin decreased from a 12-month high of 2.3% in May and June, to 2.1% in July, 1.9% in August, and 1.6% in September.

At the same time, hospital operating margins inched upward for a second consecutive month. The median YTD operating margin for hospitals nationwide rose to 5.1% in September, up from 4.9% in August and 4.8% in July.\* Looking at how hospital margins have changed over time, the median change in hospital operating margin

rose 2.1 percentage points from September 2023 to September 2024, and decreased just 0.1 percentage point from August to September 2024.

Changes in operating margins varied for hospitals of different sizes and in different regions of the country. Looking first by size, the smallest hospitals with 0–25 beds had the biggest median change in hospital operating margin of 4.2 percentage points YOY. The largest hospitals with 500 beds or more saw a 2.4 percentage points YOY increase, while hospitals with 300–499 beds had the least increase, with median change in hospital operating margin up 1.3 percentage point YOY in September. For hospitals in different regions, the median change in operating margin ranged from increases of 1.1 percentage point for those in the Northeast/Mid-Atlantic to 3.9 percentage points for hospitals in both the West and Great Plains.

**Median Hospital and Health System Operating Margins\***  
Nationally, Year-to-Date



Source: Comparative Analytics

\*Note: Hospital operating margins may not be fully allocated with corporate expenses.

# Patient volumes up across both inpatient and outpatient metrics

Patient demand was mixed in September, decreasing across key metrics month-over-month, but increasing for both inpatient and outpatient volumes YOY. Inpatient admissions had the biggest increase from September 2023 to September 2024 at 3.8%, due in part to January’s expansion of the Centers for Medicare and Medicaid Services’ Two-Midnight Rule to Medicare Advantage patients. The rule governs how long patients can be kept in outpatient observation status before being admitted for inpatient care. Outpatient visits rose 3.6% over the same period. Observation visits decreased 1.2% and emergency visits were down 2.9% YOY.

From August to September 2024, outpatient visits decreased 5.7% and inpatient admissions were down 4.5%. Compared to two years ago in September 2022, inpatient admissions were up 7.0% and outpatient visits increased 3.0%.

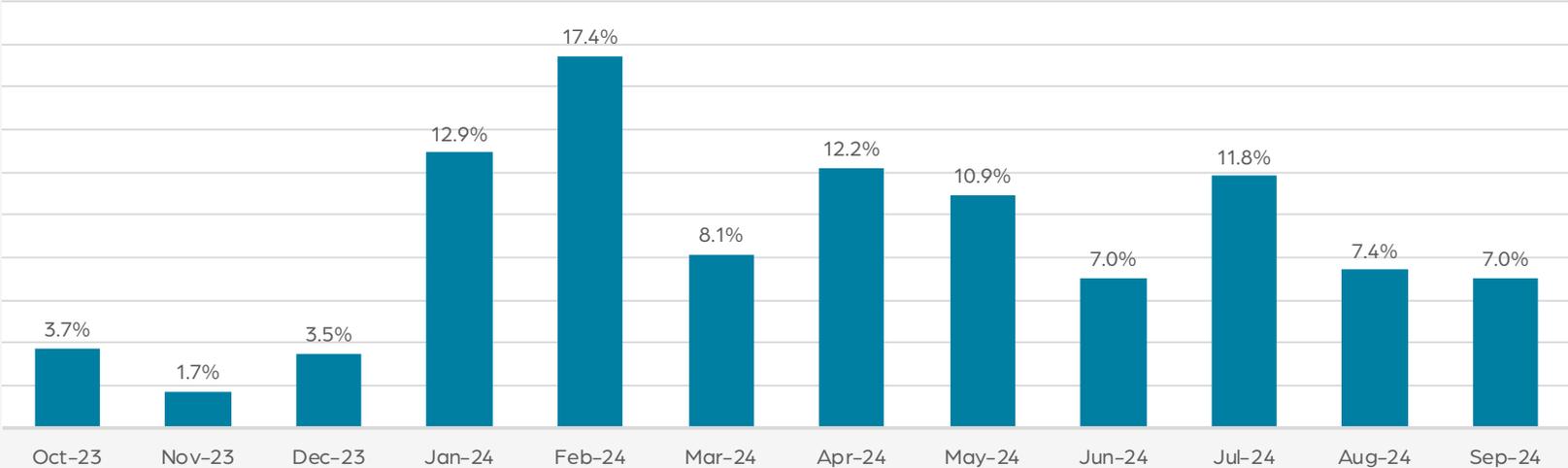
YOY volume changes also varied by service line. Infectious disease had the biggest YOY increase at 8.3%, followed by allergy and immunology at 4.0%.

The ear, nose, and throat service line had the biggest decrease at 5.1% YOY, followed by breast health, which saw volumes decline 4.3% YOY.

Patient volumes increased YOY across eight of 15 common procedure types. Outpatient positron emission tomography (PET) had the biggest YOY increase at 11.7%, followed by outpatient chemistry/hematology lab procedures at 8.6%. Inpatient primary knee replacements continued to have the biggest declines, with volumes for such procedures dropping 21.4% YOY as such procedures shift to outpatient care settings.

Children’s hospitals also continued to see mixed volumes. Inpatient admissions increased 3.2% YOY while outpatient visits decreased 2.6% from September 2023 to September 2024. Observation visits were up 1.0% and emergency visits decreased 5.2% over the same period, according to the latest data as of Sept. 30, 2024.

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



Source: [StrataSphere Research Report: National Patient and Procedure Volume Tracker™](#), Data as of Sept. 30, 2024.

# Purchased services see biggest expense increases in September

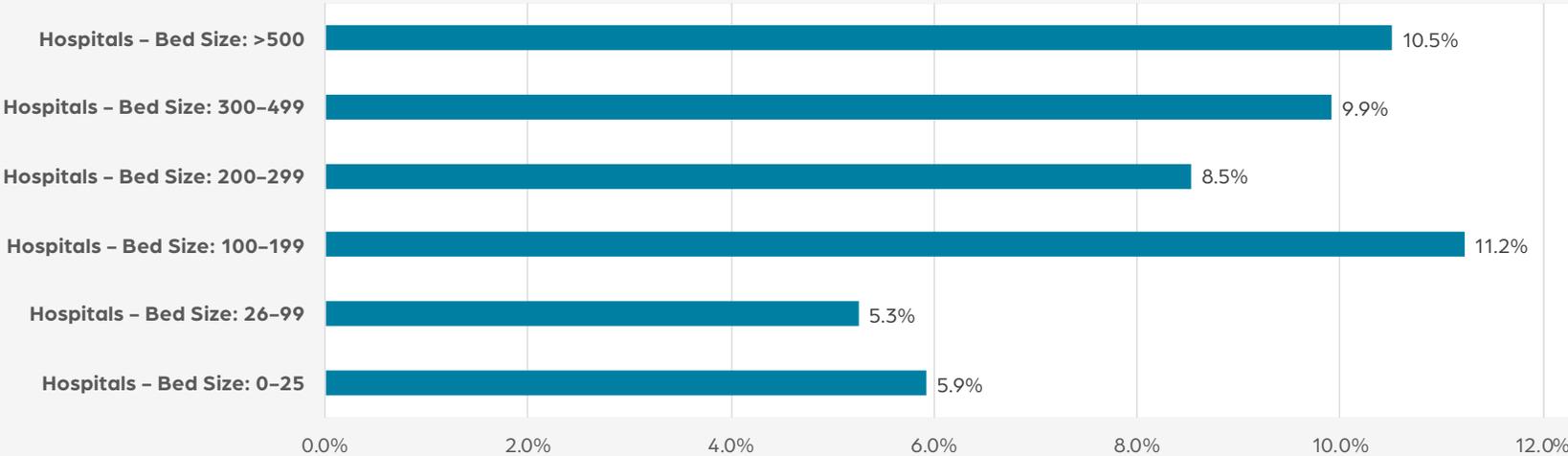
As discussed in the Market Analysis section, hospital expenses continued to rise across both labor and non-labor categories throughout the third quarter, but non-labor expense increases outpaced labor expense growth in September. Total expense increased 5.9% from September 2023 to September 2024, driven by a 6.3% YOY increase in total non-labor expense and a 5.2% increase in total labor expense.

Purchased services had the biggest YOY increase in September compared to all other expense categories. The metric jumped 8.8% YOY. For hospitals of different sizes, increases in purchased service expense ranged from 5.3% YOY for smaller hospitals with 26–99 beds to 11.2% YOY for mid-sized hospitals with 100–199 beds. By region, YOY increases ranged from 4.8% for hospitals in the Northeast/Mid-Atlantic to 12.3% for those in the South.

Other non-labor expenses also had sizable increases, with supply expense up 8.6% YOY and drugs expense up 6.8% YOY for hospitals nationwide. Hospitals saw some relief month-over-month, however. From August to September 2024, total expense decreased 2.2%, total labor expense was down 2.3%, and total non-labor expense decreased 2.0%.

Expenses increased across both timeframes after adjusting for patient volumes. Total expense per adjusted discharge rose 2.8% YOY and 3.7% month-over-month, labor expense per adjusted discharge was up 1.5% YOY and 3.0% month-over-month, and non-labor expense per adjusted discharge increased 4.3% YOY and 3.7% month-over-month.

**Purchased Service Expense**  
Year-Over-Year % Change, Sept. 2024



Source: Comparative Analytics

# Hospitals continue to see gross revenues grow

Gross hospital revenues grew across both inpatient and outpatient categories throughout the first three quarters of 2024, continuing trends from the prior year. In fact, September marked a 17th consecutive month of YOY growth for inpatient, outpatient, and overall gross operating revenues.

Gross hospital revenues saw sizable YOY increases in September. Outpatient revenue had the biggest YOY jump at 9.1%. Inpatient revenue rose 6.4% YOY and gross operating revenue increased 8.7% YOY.

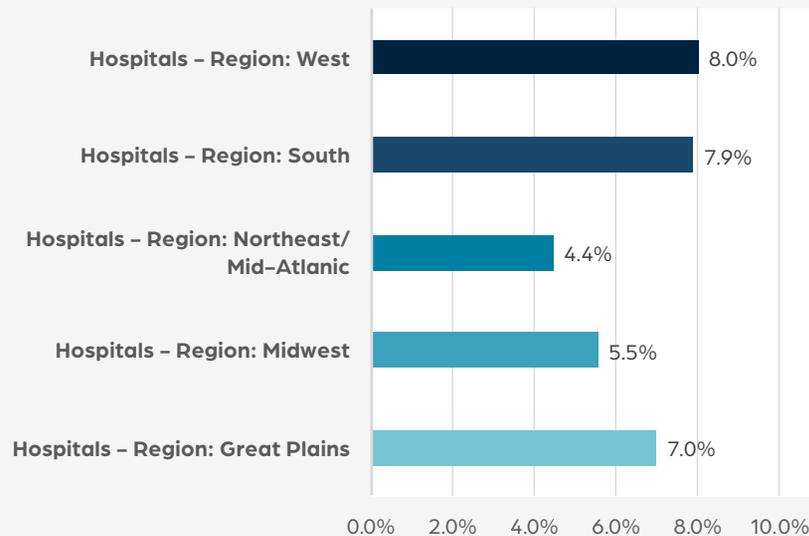
For hospitals of different sizes, YOY increases in gross outpatient revenue ranged from 7.5% for mid-sized hospitals with 200–299 beds to 10.4% for the largest hospitals with 500 beds or more. Increases in gross inpatient revenue ranged from 6.0% for the smallest hospitals with 0–25 beds to 10.2% for the largest hospitals with 500 beds or more.

By region, YOY increases in gross outpatient revenue ranged from 7.6% for hospitals in the South to 10.9% for those in the Northeast/Mid-Atlantic. For inpatient revenue, YOY increases ranged from 4.4% for hospitals in the Northeast/Mid-Atlantic to 8.0% for those in the West.

However, gross revenues decreased from August to September 2024. Gross operating revenue was down 4.2%, outpatient revenue dropped 4.8%, and inpatient revenue decreased 3.2% month-over-month. Revenues increased after being adjusted for patient volumes. Net patient service revenue (NPSR) per adjusted discharge rose both YOY and month-over-month at 4.2% and 2.1%, respectively. NPSR per adjusted patient day was up 5.5% YOY and 0.4% from August to September 2024.

## Inpatient Revenue

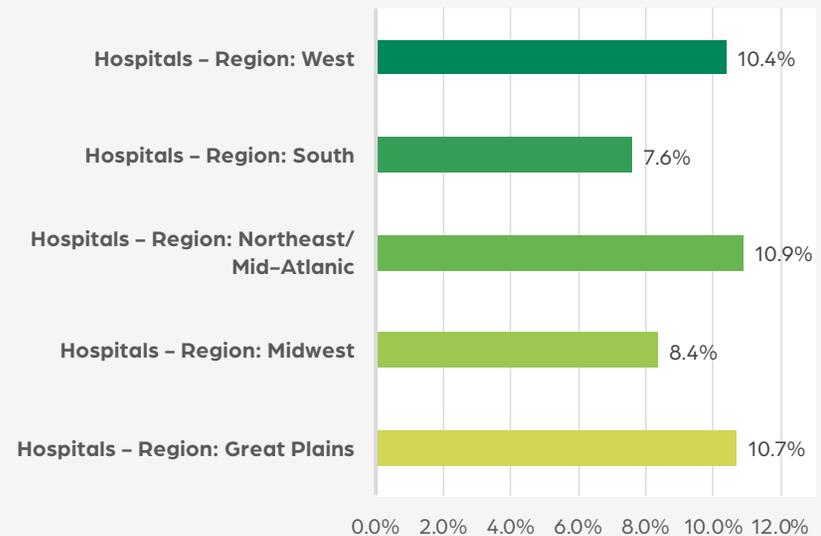
Year-Over-Year % Change, Sept. 2024



Source: Comparative Analytics

## Outpatient Revenue

Year-Over-Year % Change, Sept. 2024



Source: Comparative Analytics

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.



