# Healthcare Analytics

A comprehensive multi-dimensional healthcare dashboard providing insights across five key areas: **Executive Overview** for high-level performance metrics, **Patient Demographics** for population insights, **Clinical Analysis** for medical outcomes and departmental performance, **Financial Analysis** for revenue and billing insights, and **Patient Experience** for satisfaction tracking. This features interactive visualizations, time-based filtering, and cross-departmental comparisons to support data-driven healthcare management and strategic decision-making across all operational aspects.

# Executive Overview

**Healthcare Analytics**

- Executive Overview
- Patient Demographics
- Clinical Analysis
- Financial Analysis
- Patient Experience

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## Key Metrics

| Total Patients | Total Visits | Admission Rate | Emergency Visits |
|---|---|---|---|
| 4,973 | 5,000 | 24.6% | 38.6% |

| Total Revenue | Insurance | Avg LOS (days) | Avg S-Score |
|---|---|---|---|
| 1.13M | 66.3% | 4.87 | 3.84 |

## Visit Trend over Time

Jan 2024 — Jul 2024 — Jan 2025
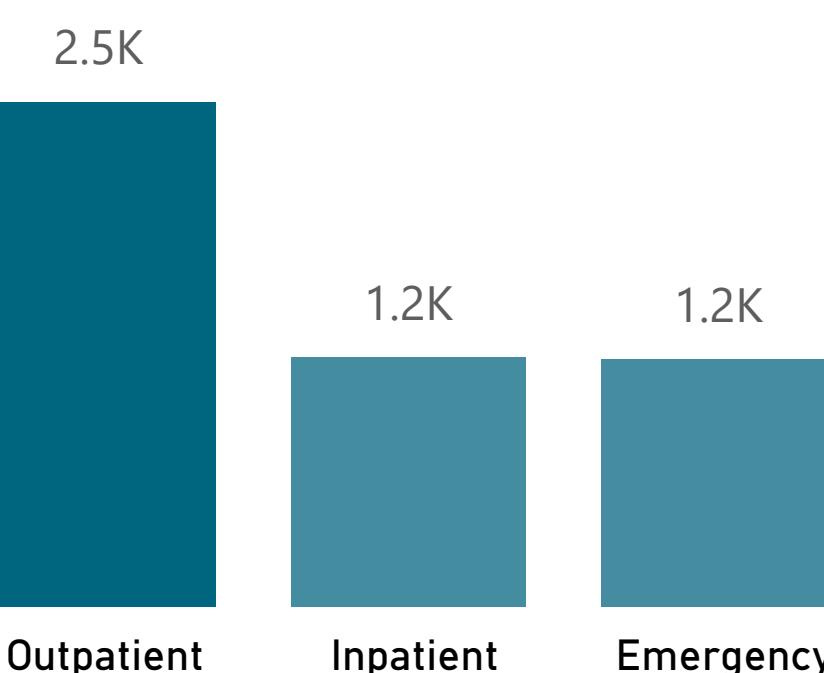
## Total Visits by Department

| Cardiology | General | Orthopedics | Neurology | Pediatrics |
|---|---|---|---|---|
| 1,281 | 1,185 | 1,179 | 697 | 658 |
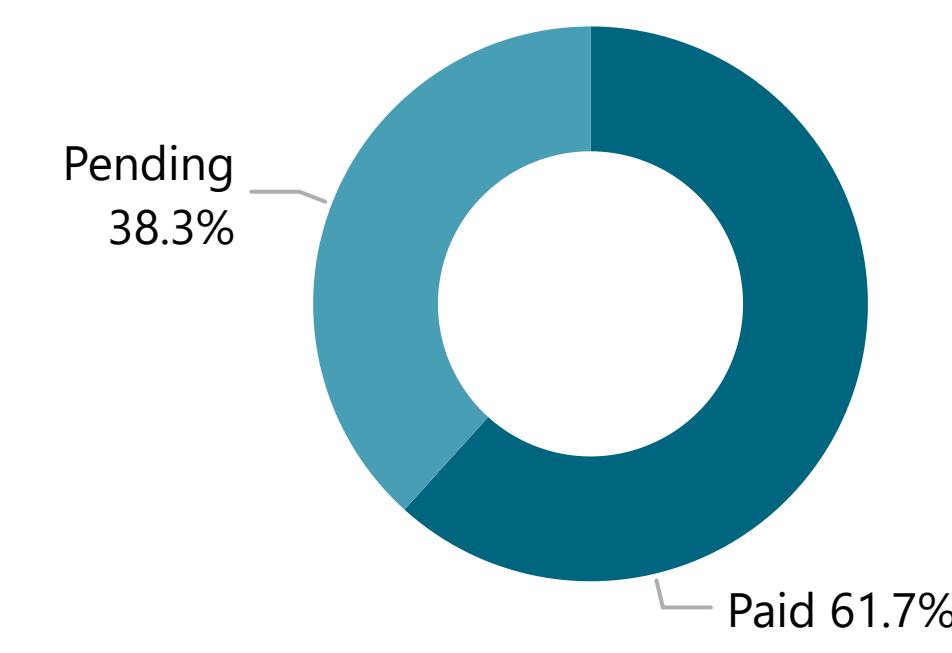
## Total Visits by Referral Source

| Emergency | Self | Physician |
|---|---|---|
| 1681 | 1661 | 1658 |

## Total Visits by Service Type

| Outpatient | Inpatient | Emergency |
|---|---|---|
| 2.5K | 1.2K | 1.2K |

## Payment Method Usage%

- Pending 38.3%
- Paid 61.7%

# Patient Demographics

## Healthcare Analytics

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### Total Patients
**4,973**
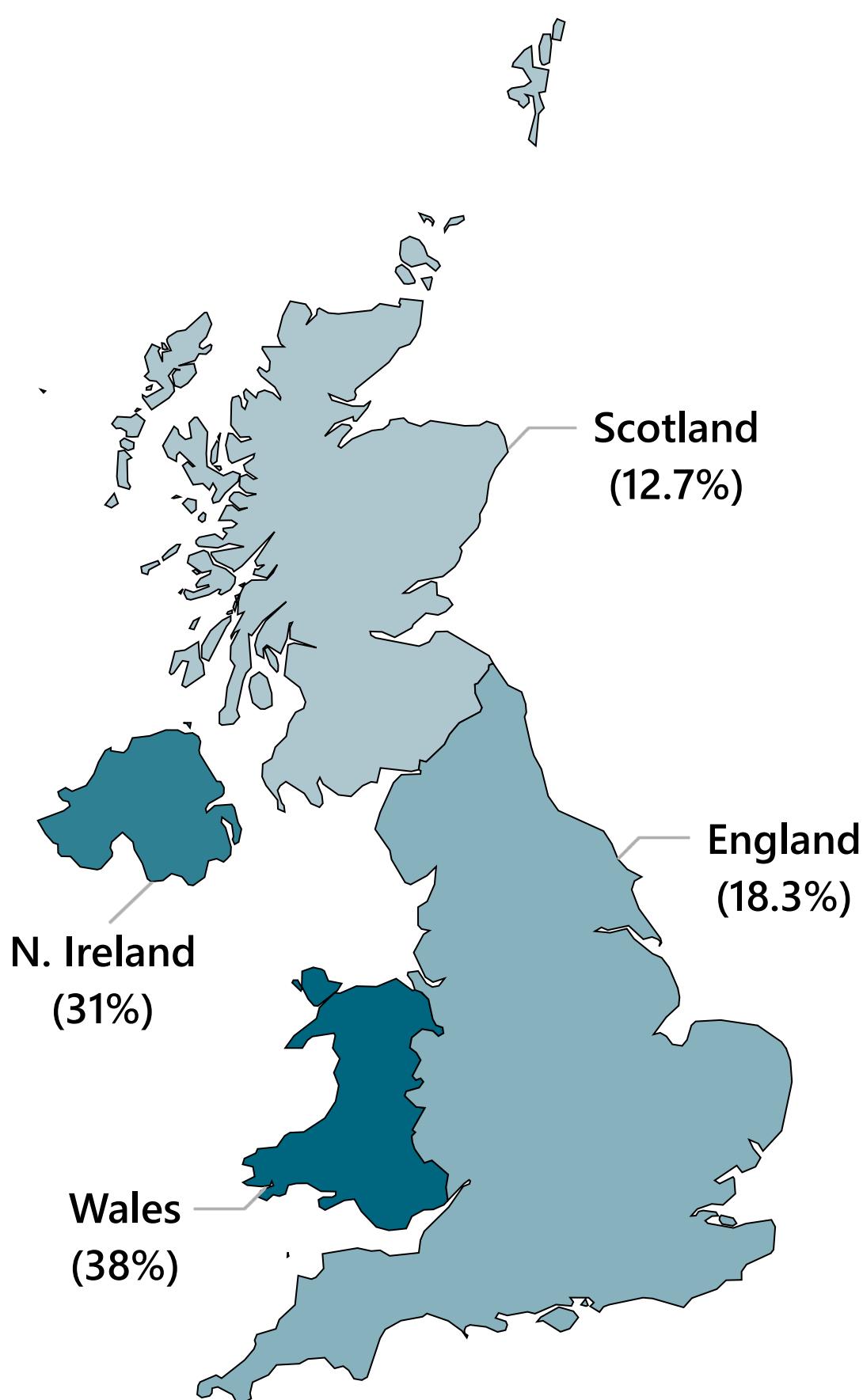
Dept: All ▾
Service: All ▾

### Geographic Spread

[ State ]   City
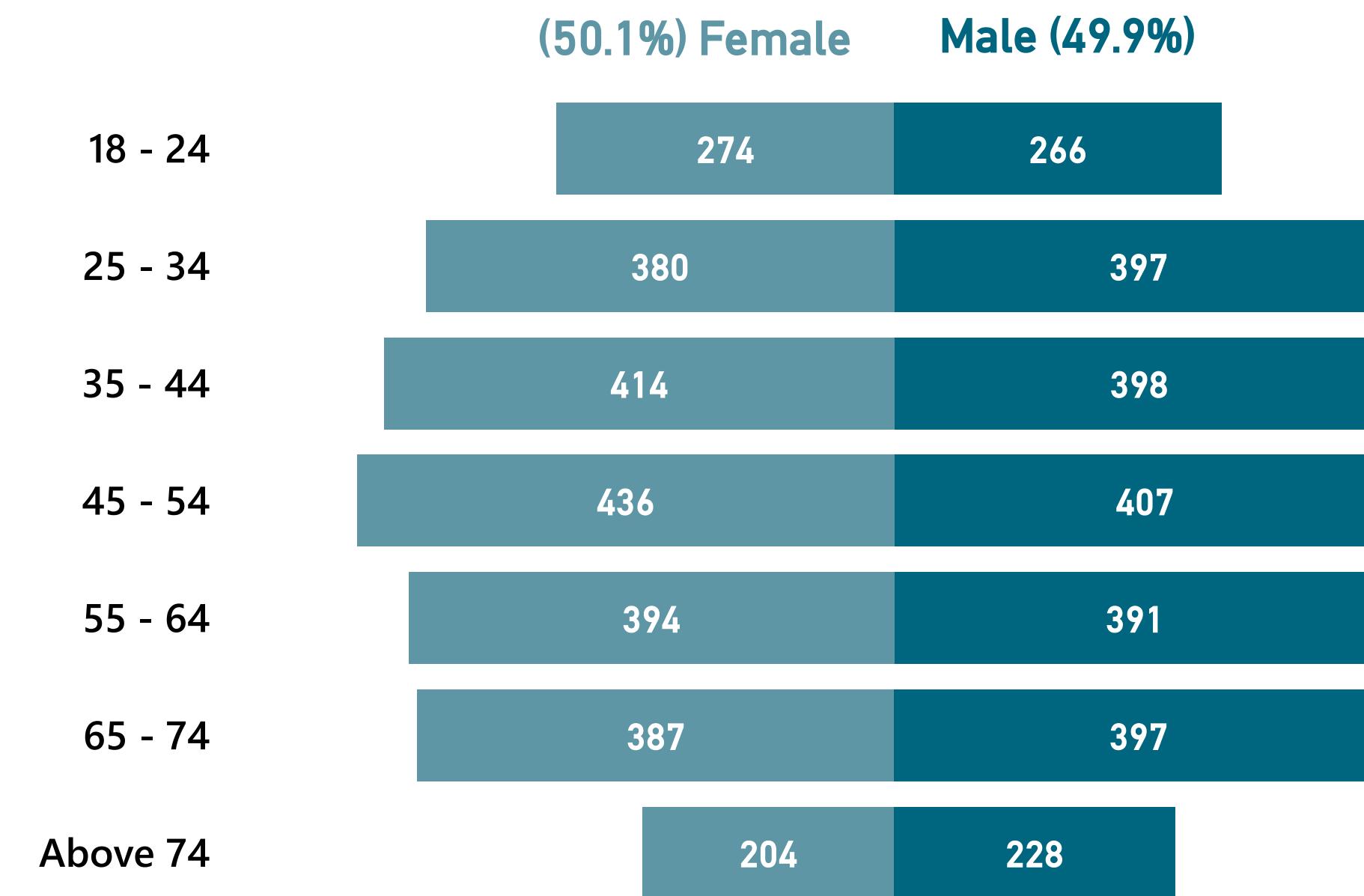
Scotland
(12.7%)

N. Ireland
(31%)

Wales
(38%)

England
(18.3%)

### Ethnic Comparison

| Ethnicity | Count |
|-----------|-------|
| Black | 1064 |
| Asian | 1033 |
| Hispanic | 975 |
| Other | 970 |
| White | 931 |

### Total Patients by Gender x Age Group

| Age Group | (50.1%) Female | Male (49.9%) |
|-----------|----------------|--------------|
| 18 - 24 | 274 | 266 |
| 25 - 34 | 380 | 397 |
| 35 - 44 | 414 | 398 |
| 45 - 54 | 436 | 407 |
| 55 - 64 | 394 | 391 |
| 65 - 74 | 387 | 397 |
| Above 74 | 204 | 228 |
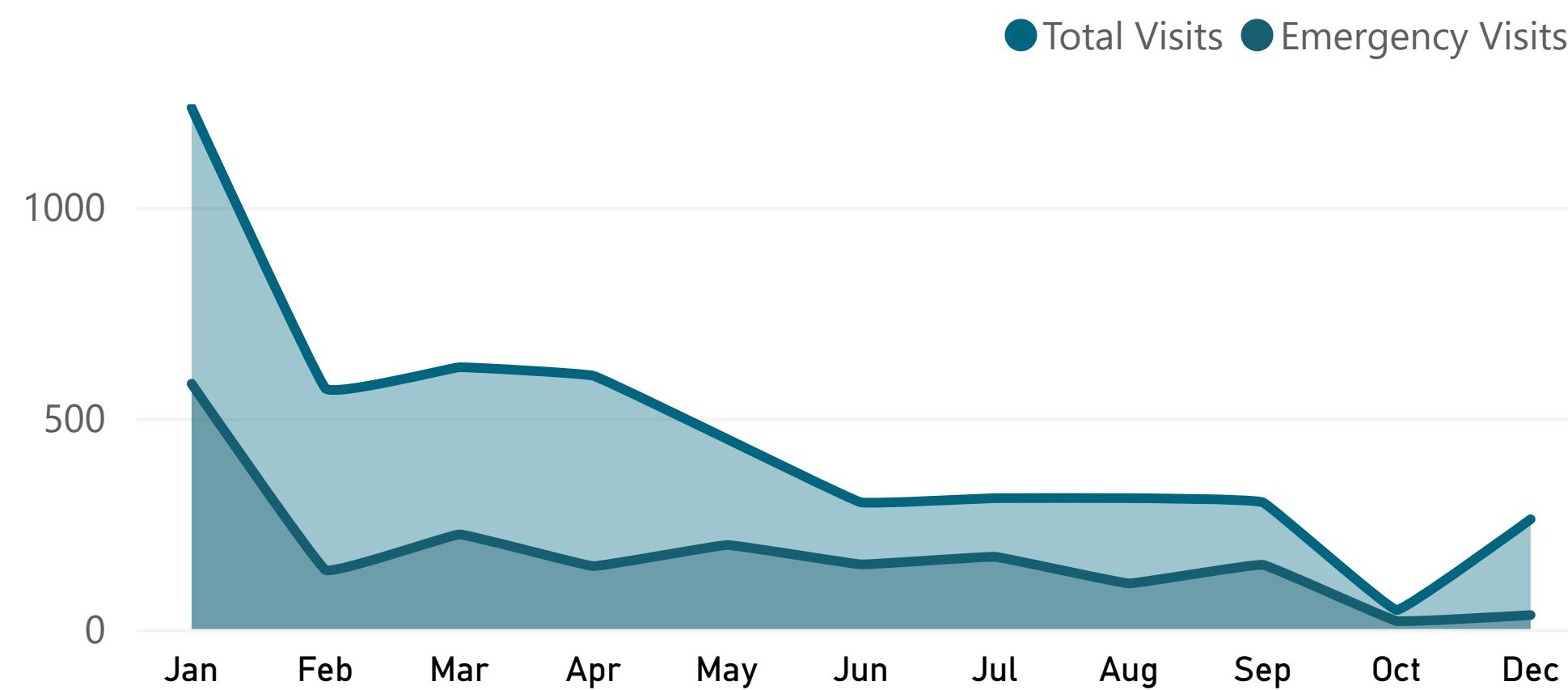
# Clinical Analysis

All Year          All Month
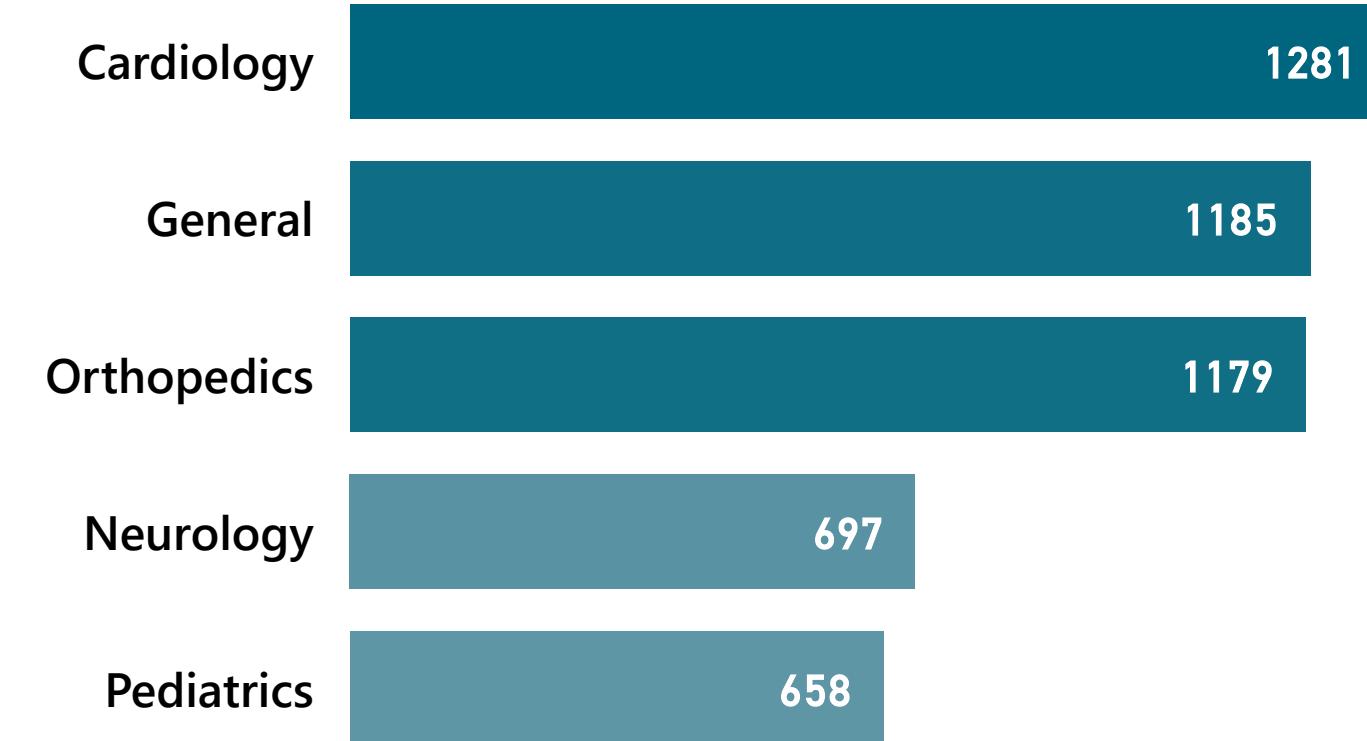
| Total Visits | Emergency Visits | Readmission | Avg LOS (days) |
|---|---|---|---|
| **5,000** | **38.6%** | **43.6%** | **4.87** |

## Annual Visits Trend

● Total Visits  ● Emergency Visits
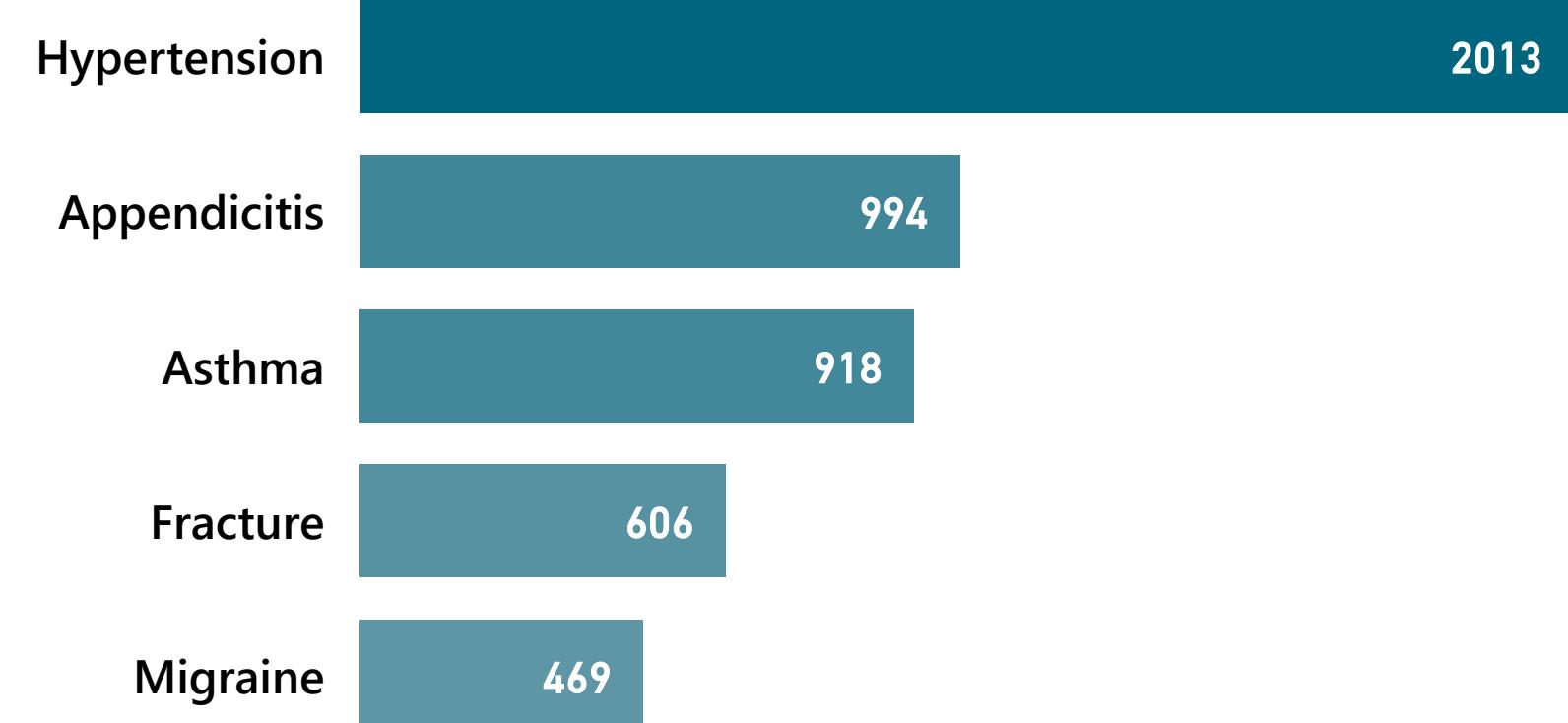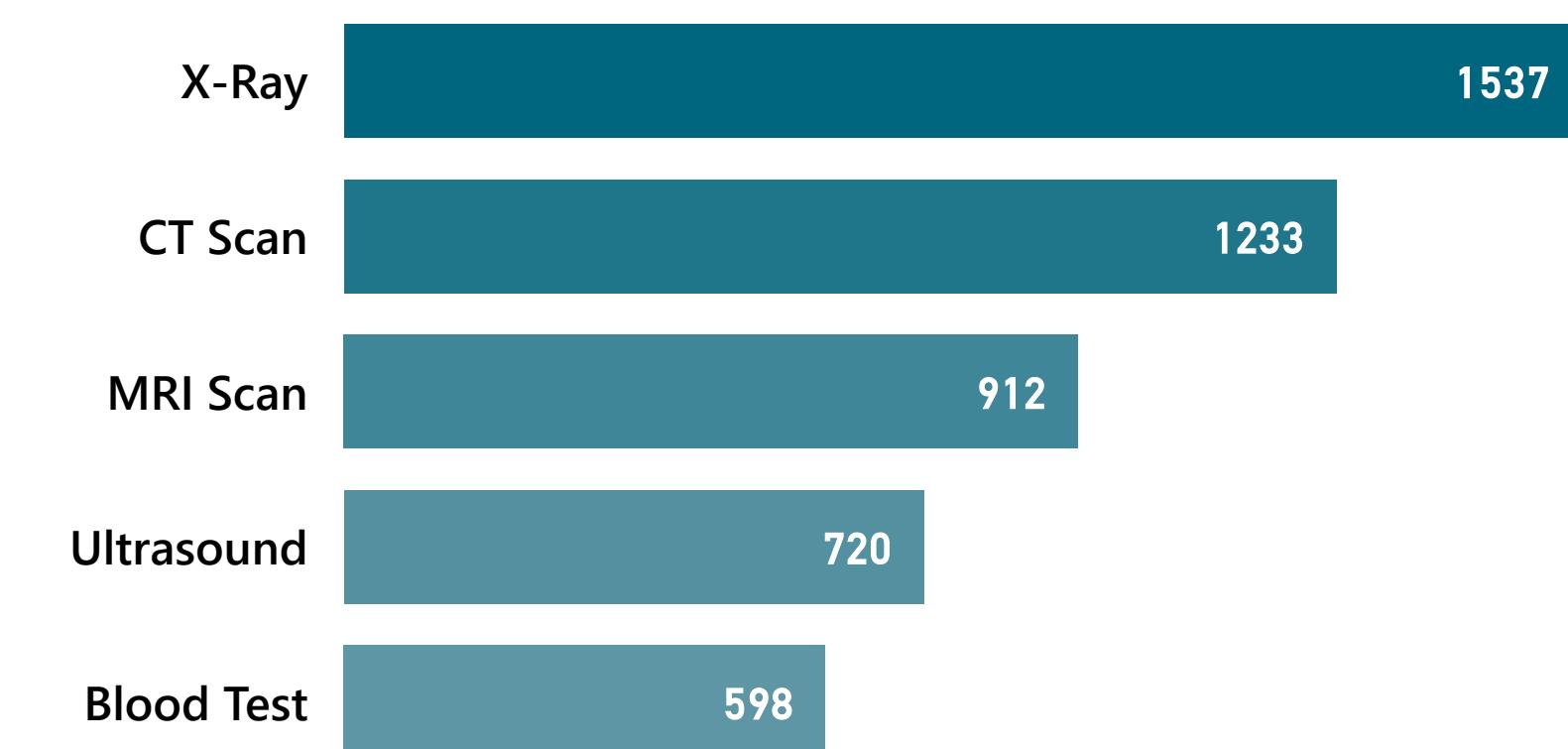


## Department wise Visits

| Department | Visits |
|---|---|
| Cardiology | 1281 |
| General | 1185 |
| Orthopedics | 1179 |
| Neurology | 697 |
| Pediatrics | 658 |

## Diagnosis wise Visits

| Diagnosis | Visits |
|---|---|
| Hypertension | 2013 |
| Appendicitis | 994 |
| Asthma | 918 |
| Fracture | 606 |
| Migraine | 469 |

## Procedure wise Visits

| Procedure | Visits |
|---|---|
| X-Ray | 1537 |
| CT Scan | 1233 |
| MRI Scan | 912 |
| Ultrasound | 720 |
| Blood Test | 598 |

# Financial Analysis

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### Billing Amount
**$3.4M**
Per Visit (Avg): **$671**

### Insurance...
**$2.2M**
Per Visit (Avg): **$456**

### Out-of-Pocket
**$1.1M**
Per Visit (Avg): **$226**

### Insured Patients
**97.6%**
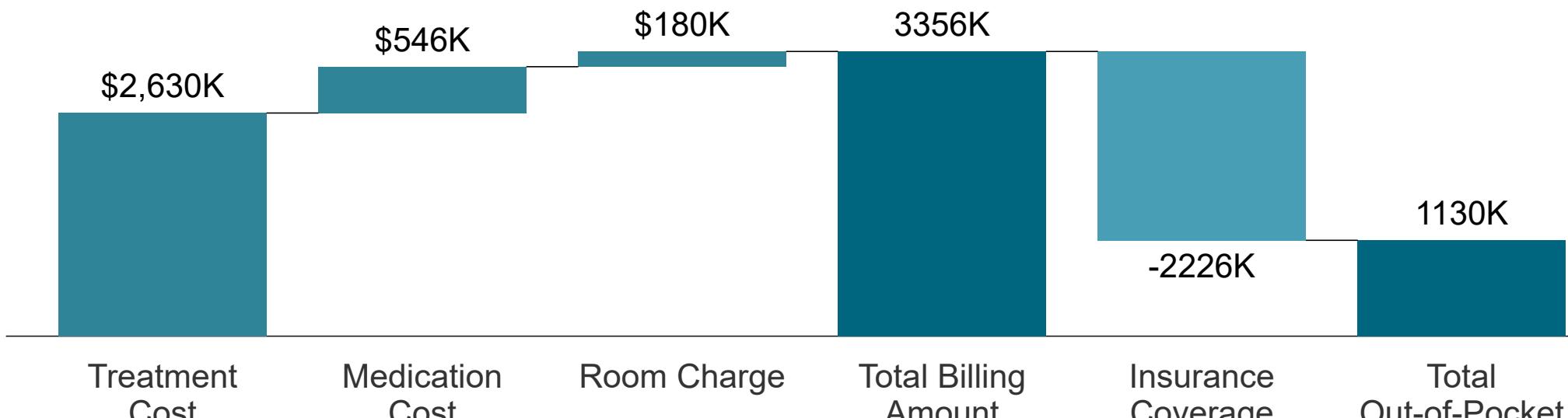
### Collection Rate
**38.3%**

### Room Utilization
**49.9%**

**Department**
All

**Diagnose**
All

**Procedure**
All

## Revenue Breakdown

| | |
|---|---|
| Treatment Cost | $2,630K |
| Medication Cost | $546K |
| Room Charge | $180K |
| Total Billing Amount | 3356K |
| Insurance Coverage | -2226K |
| Total Out-of-Pocket | 1130K |
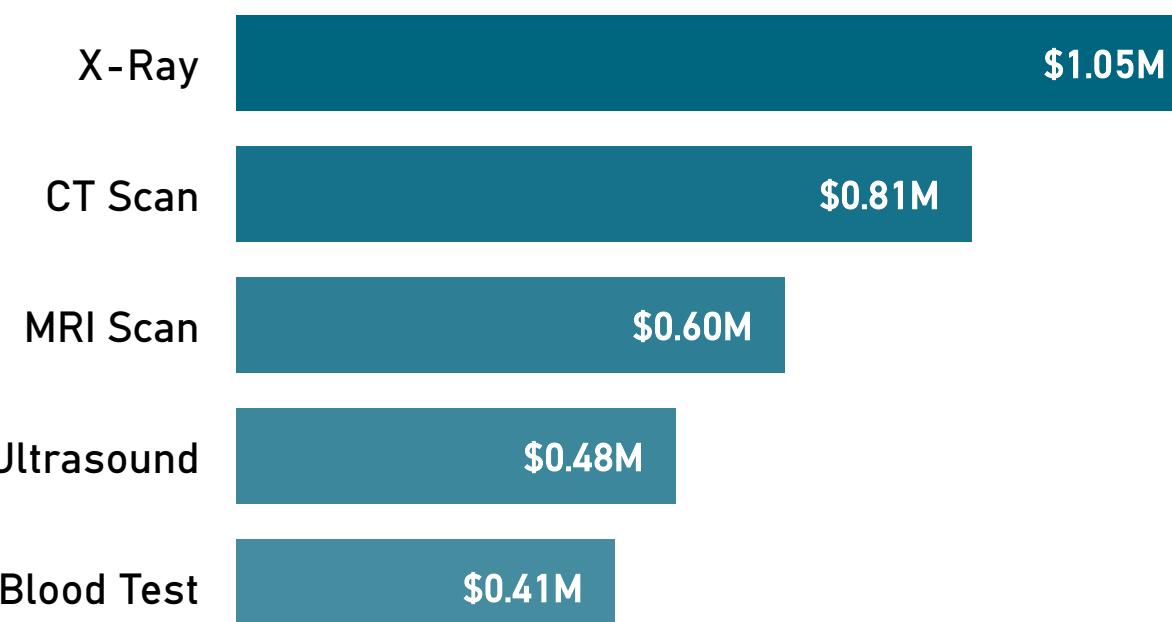
## Total Billing Amount by Procedure

| Procedure | Amount |
|---|---|
| X-Ray | $1.05M |
| CT Scan | $0.81M |
| MRI Scan | $0.60M |
| Ultrasound | $0.48M |
| Blood Test | $0.41M |

## Total Billing by Dept

| Department | Billing |
|---|---|
| Cardiology | $847K |
| General | $783K |
| Orthopedics | $813K |
| Neurology | |
| Pediatrics | |

## Provider Performance Metrics
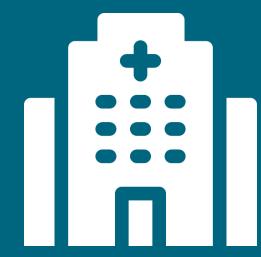
| Provider Name | Total Visits | Avg S-Score | Total Billing |
|---|---|---|---|
| Dr. Emma Jones | 467 | 4.85 | $325K |
| Dr. Johnson Grek | 445 | 5.05 | $306K |
| Dr. Olu Abisola | 1358 | 5.45 | $942K |
| Dr. Ravi Patel | 855 | 3.36 | $571K |
| Dr. Sade Kikiola | 1875 | 2.35 | $1,212K |

## Insurance Provider Metrics

| Provider | Insurance | Patients | Total Visits |
|---|---|---|---|
| AXA | $743K | 1,637 | 1,692 |
| Aviva | $751K | 1,633 | 1,669 |
| Allianz | $731K | 1,604 | 1,639 |

# Patient Experience

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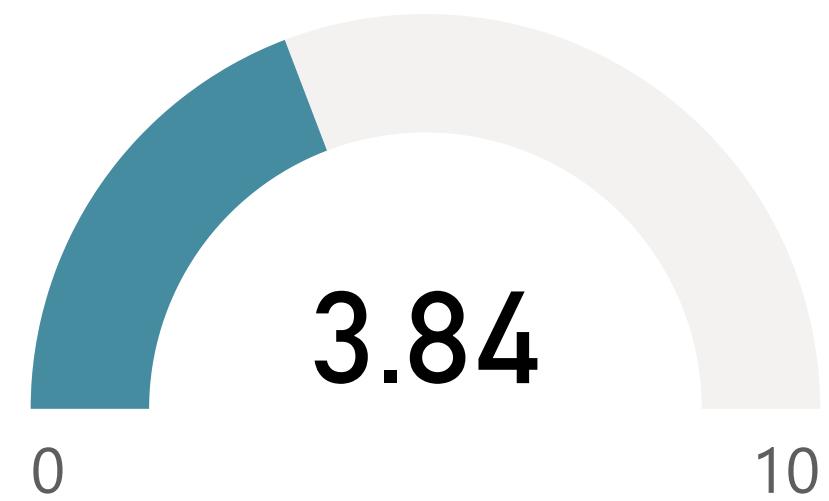
Female | Male | 18 – 24 | 25 – 34 | 35 – 44 | 45 – 54 | 55 – 64 | 65 – 74 | Above 74

## Avg Satisfaction Rate

0    **3.84**    10
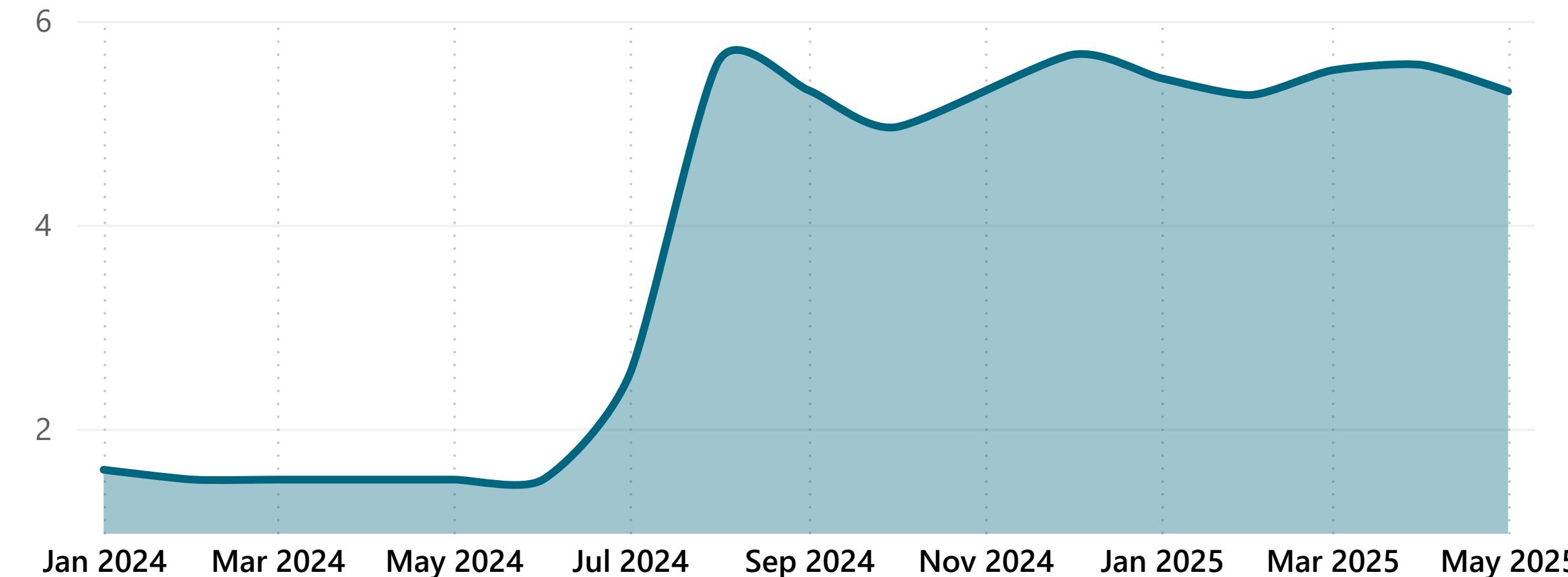
## Follow-up Visits
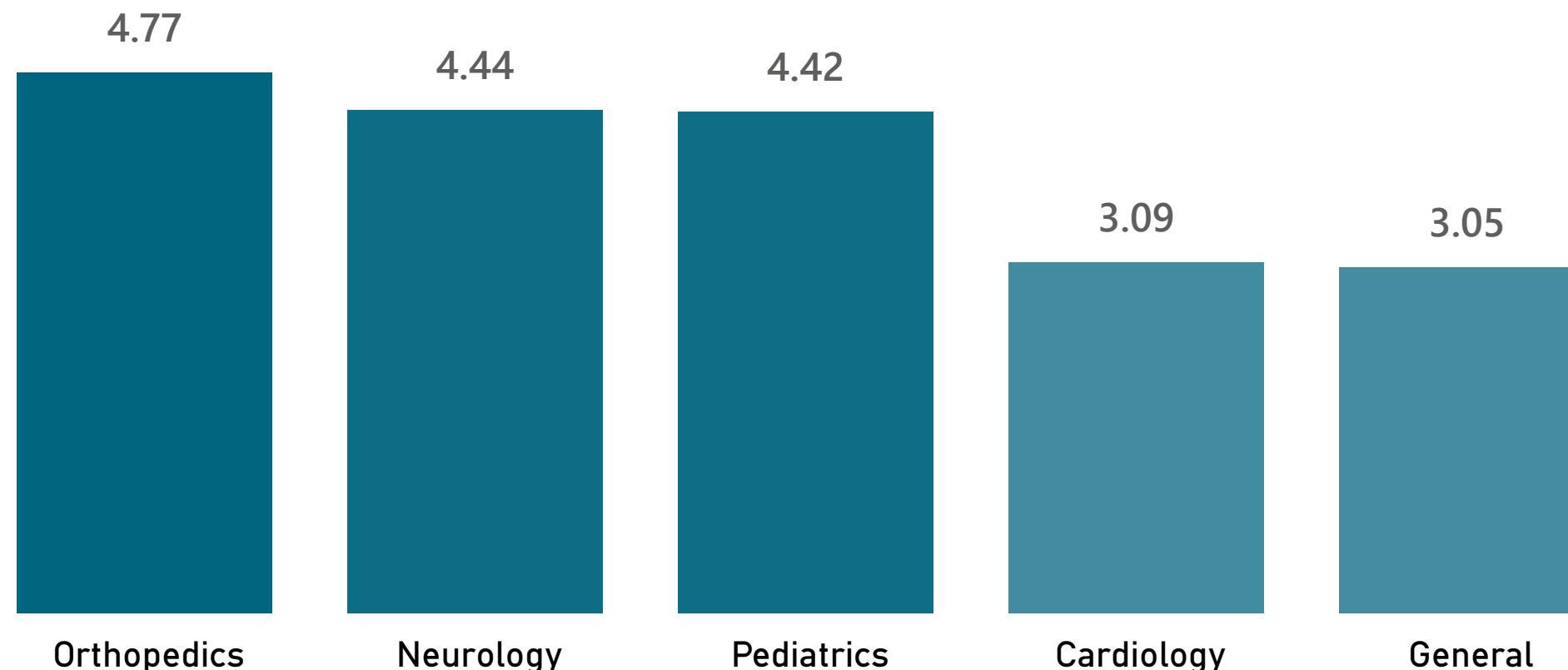
**2507**

## Satisfaction Trend over Time

Jan 2024   Mar 2024   May 2024   Jul 2024   Sep 2024   Nov 2024   Jan 2025   Mar 2025   May 2025

## Department wise Avg Satisfaction Score

| Orthopedics | Neurology | Pediatrics | Cardiology | General |
|-------------|-----------|------------|------------|---------|
| 4.77 | 4.44 | 4.42 | 3.09 | 3.05 |

## Avg Satisfaction Score by Referral

| Physician | Self | Emergency |
|-----------|------|-----------|
| 3.87 | 3.87 | 3.79 |