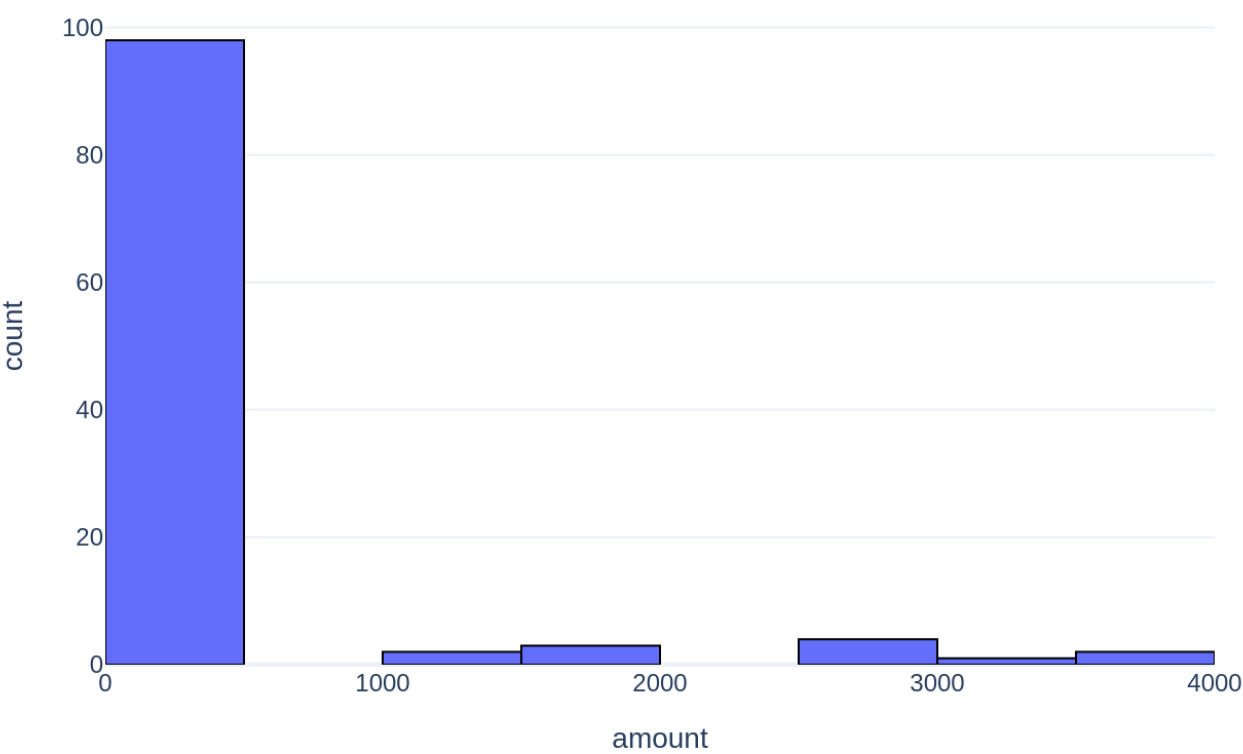


# Billing Data Analysis Report

## Summary

Distribution of amount

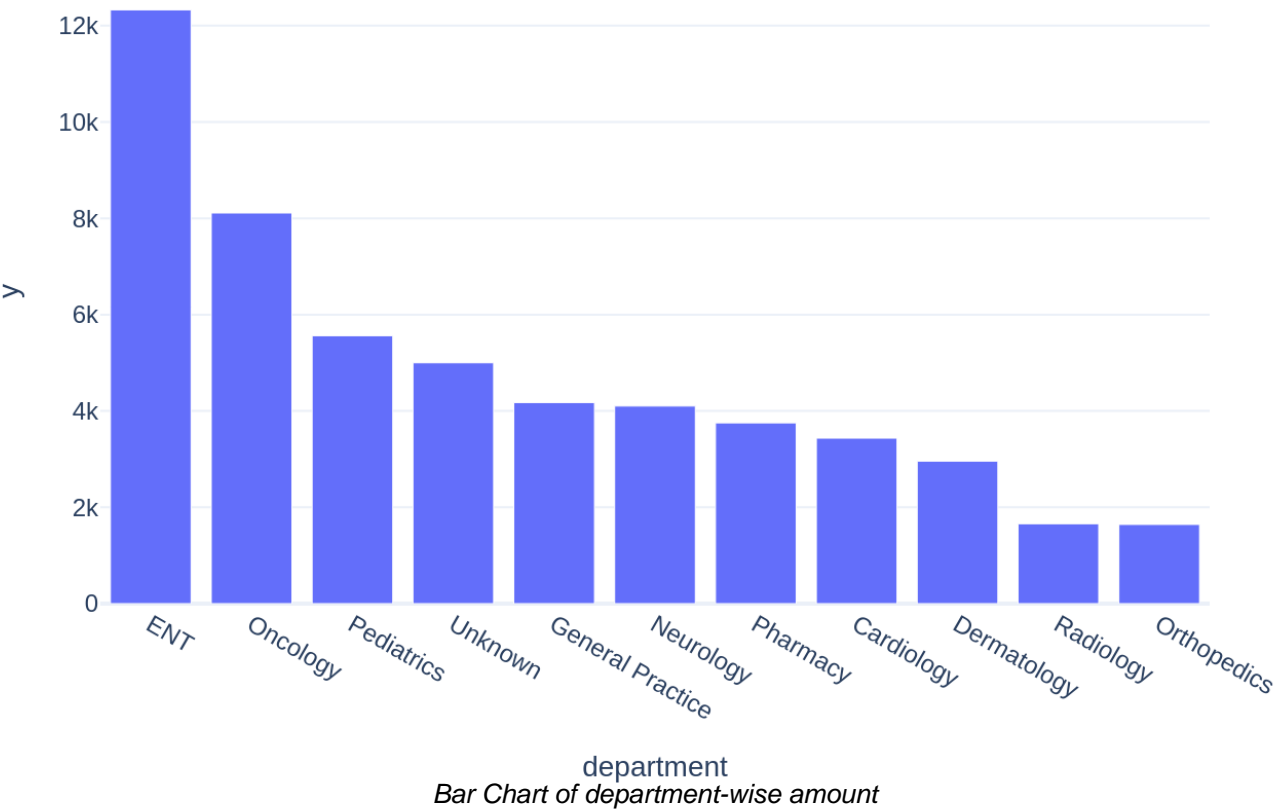


*Histogram of amount*

This report analyzes the billing data for 1100 records to ensure accuracy and timeliness. The validation results show that there are no missing values, duplicate rows, or irregular column types. The data consists of 10 unique customer names, 11 unique departments, and 4 unique status values (Paid, Pending, Unpaid, and Unknown). The billing dates span from January 1, 2023, to April 10, 2023.

# Billing Data Analysis Report

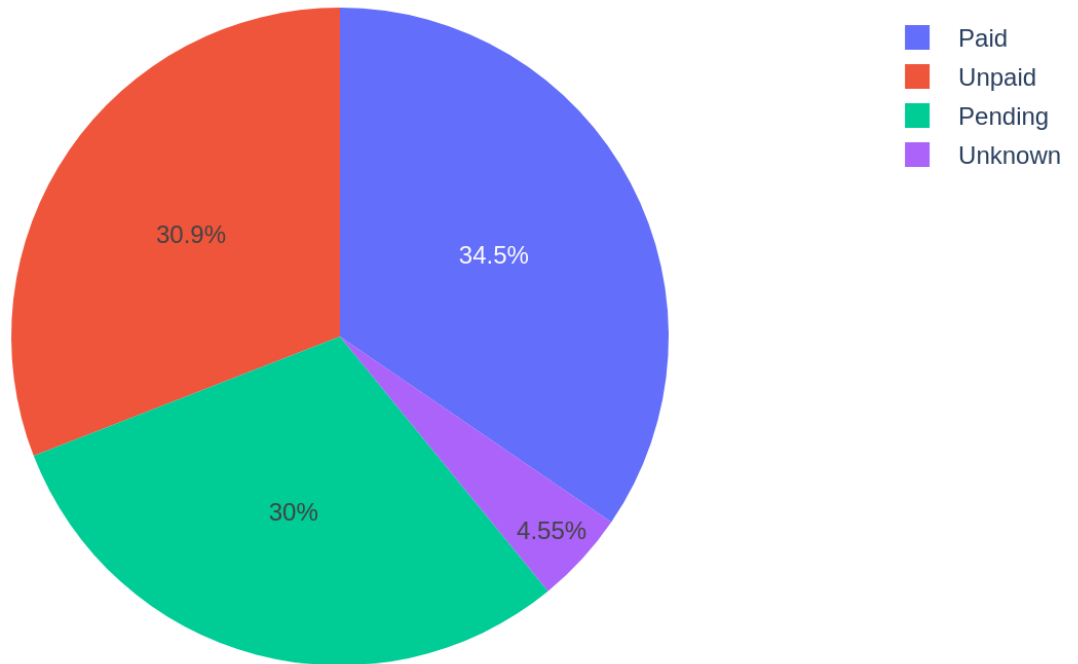
Total amount by department



## Spending Trends

# Billing Data Analysis Report

## Distribution of status



*Pie Chart of status*

The average payment amount is approximately \$442.08. The highest payment amount is \$3849.77, and the lowest is \$50.58. The payment amounts range from \$50.58 to \$3849.77.

The top 5 customers by total payment amount are:

1. Olivia Davis - \$1,433.83
2. Emma Brown - \$1,364.11
3. Chris Lee - \$1,254.95
4. John Doe - \$1,234.91
5. David Wilson - \$1,184.33

The top 5 departments by total payment amount are:

# Billing Data Analysis Report

1. Pharmacy - \$2,511.19
2. ENT - \$2,245.91
3. Radiology - \$1,833.91
4. Oncology - \$1,743.81
5. Dermatology - \$1,641.11

## Insights

- \* The billing cycle times are relatively consistent, with most billing dates falling within a 3-month period.
- \* There are 4 statuses in the data: Paid, Pending, Unpaid, and Unknown. The Unknown status accounts for only 2 records, which may indicate errors or inconsistencies in the data.
- \* The average payment amount for Paid records is \$451.92, which is higher than the overall average payment amount. This suggests that Paid records tend to have higher payment amounts.
- \* The Pending status accounts for 24.55% of the records, which may indicate a significant number of pending payments that need to be addressed.
- \* The Unpaid status accounts for 20.91% of the records, which may indicate a need for more aggressive payment collection efforts.

## Recommendations

1. **\*\*Address Unknown Status Records\*\***: Investigate and resolve the 2 records with Unknown status to ensure accuracy and consistency in the data.
2. **\*\*Follow up on Pending Payments\*\***: Reach out to customers with Pending payments to expedite the payment process and reduce the number of pending payments.
3. **\*\*Target High-Paying Customers\*\***: Focus on customers with high total payment amounts to ensure timely and successful payment collection.
4. **\*\*Analyze Departmental Spending\*\***: Investigate the spending patterns of the top 5 departments to identify opportunities for cost optimization and resource allocation.

## Billing Data Analysis Report

5. **Monitor Late Payments**: Implement a system to track and address late payments to minimize revenue loss and ensure timely payment collection.