SQL Document

## Introduction:

SQL documentation serves as a comprehensive guide aimed at addressing the business problem of an increasing bounce rate, which has been linked to patient dissatisfaction. With a primary objective to minimize this bounce rate, the documentation outlines the scope and purpose of our analytical approach. The documentation elucidates how SQL analysis can directly impact business success criteria, such as reducing bounce rate by at least 30%. Through this documentation, our intended audience gains valuable insights into leveraging SQL for strategic decision-making, aligning with our overarching objectives of enhancing patient satisfaction and organizational profitability.

## Summary Statistics:

Provide a summary table containing the key insights from the data analysis :

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Metric** | **Quantity** | **Return Quantity** | **Final Cost** | **Final Sales** | **Returned MRP** |
| Average | 2.23 units | 0.29 units | $124.82 | $234.04 | $29.13 |
| Median | 1 unit | 0 units | $53.65 | $86.42 | $0 |
| Common Value | 1 unit | 0 units | $49.35 | $0 | $0 |
| Variation | Moderate | Low | High | High | High |
| Range | 0 - 150 units | 0 - 50 units | $40 - $33,178 | $0 - $39,490 | $0 - $8,014 |
| Distribution Shape | Right-skewed | Right-skewed | Right-skewed | Right-skewed | Right-skewed |

Interpretation:

* **Quantity**: Customers typically purchase around 2 units of medication per transaction, indicating a moderate demand.
* **Return Quantity**: Returns are infrequent, with the majority of transactions not involving any returned items, suggesting a low rate of dissatisfaction or product issues.
* **Final Cost**: The average cost of medication per transaction is $124.82, but costs vary significantly, highlighting the need for pricing strategies tailored to different customer segments.
* **Final Sales**: Sales figures are positively skewed, indicating that a few high-value transactions contribute significantly to total sales, which may present opportunities for targeted marketing or upselling.
* **Returned MRP**: Most returned items have a retail price close to zero, indicating that returned products often have little resale value, which may impact profitability and inventory management decisions.

## Recommendations

Provide actionable recommendations based on the analysis

* Monitor inventory levels closely to optimize stock levels.
* Investigate the factors contributing to high return rates and take corrective actions.
* Implement pricing strategies to maximize profitability, considering the variance in final sales.

## Conclusion

In conclusion, the insights gleaned from our SQL documentation present actionable strategies to address the business problem of increasing bounce rates and patient dissatisfaction. By leveraging SQL analysis, we have identified key opportunities to minimize bounce rates while optimizing inventory costs, aligning with our business objectives. we anticipate a tangible improvement in patient experiences and overall business performance. As we move forward, the learnings from this documentation will guide informed decision-making, fostering a culture of continuous improvement and sustainable growth within our organization.