

RISK AND REVENUE ANALYSIS OF INSURANCE CLAIMS

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Introduction

- **Problem Statement**


Claims often face delays, denials, or underpayments, leading to inefficiencies in the process.

- **Objective**

Identify low-performing insurance types, evaluate recovery rates, and suggest ways to streamline the claims process.

- **Background**

Using a synthetic dataset, this analysis mirrors real-world claims to assess performance and identify risks.



Key Performance Indicators



Claim Status

Paid, Denied, Under Review



Insurance Type

Medicare, Medicaid, Commercial, Self-Pay



Denial Reason Code

Pre existing condition, Lack of documentation, etc



Follow Up

Required/ Not required



Recovery Rate

Billed Amount vs Paid Amount

Methodology

Data Source

Kaggle data
Synthetic claims

20%



Power BI

Used to create the dashboard
Additional columns as required

50%



Data Analysis

Simple DAX queries for
calculations and
transformations

90%



Dashboard



**Claim Status
Breakdown**



**Claim Denial
Reason Codes**



**Denial Rates for
Pre-Existing Conditions**




Follow Up Rates



Financial Impact



Key Takeaways and Conclusion

- Medicaid and self-pay have the highest number of under-review and paid claims, while commercial insurance shows high denial rates and the lowest recovery rate
 - Pre-existing condition denials, poor documentation, and excessive follow-ups are key areas for process improvement
 - These findings offer actionable insights to refine policies, reduce denials, and enhance the overall patient experience
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Questions / Comments?

