**Project Title: Claims,Demography and Customer Service Analysis for Stakeholders**

* **Document Version: 1.0**
* **Date:**
* **Author:**
* **Reviewers:**

**Targeted Files:**

* 1. **Brokers Analysis Master File**
  2. **Multiple corporates Analysis**
  3. **Quarter wise Brokers analysis**
  4. **YOY analysis**

1. **Executive Summary**
   * Overview

This Power BI report provides a comprehensive analysis of Claims Summary, Hospital Summary, Disease Expenditures, Customer Services provided by MDIndia, Treatment Costs offering insights into key performance indicators, trends, and metrics relevant to the insurance processing industry. It is designed to empower stakeholders with actionable insights for informed decision-making with action plans and improved market values.

* + key findings

Key findings include the analyzing parameters such as Insurance processing parameters (Claims Summary, IP Summary etc.)

* + Purpose

Risk Assessment: Evaluate and quantify the potential risks in financial coverage of insured population.

Claims Analysis: Analyzing the claim parameters for the stakeholder to assess the performance over the period of certain time

Cost Containment: Identify areas of high Incidence rates, low settlement ratio, ICR and potential inefficiencies..

Provider Performance Evaluation: Evaluate the performance of Brokers and Corporates in terms of cost, grievances, and outcomes

Fraud Detection and Prevention: Identify irregularities and potential instances of fraud.

Compliance and Regulatory Reporting: Assess the Sum insured coverage and buffer given as per the guidelines.

Customer Experience Improvement: Ensure compliance with regulatory requirements and reporting standards by providing C-Sat Score, studying the feedbacks, Calls handled and grievance handled.

Disease Cost coverage: Analysis of different hospitals (Top 10 by the paid amount) and top diseases covered by them.

1. **Report Overview**

Report Purpose:

The purpose of this report is to inform decision-making, enhance risk management, improve healthcare outcomes, and optimize resource allocation for different Insurance brokers and Corporates.

* + **Report Structure:**
    - Overall analysis contains following sections viz.

1. IC Summary
2. Demographic Analysis
3. Claims Summary ( Paid, OS, CRS)
4. Treatment wise analysis
5. Disease wise analysis
6. Hospital wise analysis
7. Savings, Deductions and Discounts
8. Customer Services analysis
9. Trends and KPIs
10. **Data Sources**
    * **Data Connections:**
11. Flat File (Excel file) – Consolidated Dump data in .xlsx format using import mode of data connection.
12. SQL Server – Policy Master, enrollment, deductions are taken using import mode from SQL Server by running individual SQL Queries.
    * **Data Refresh:**
      + For this report data is meant to refreshed on monthly basis (Manual data Update)

Reason – Dependancy on the consolidated Excel file.

1. **Data Model**
   * **Tables and Relationships:**
     + Active relationships
2. Buffer utilization(3) ---- Buffer Utilization (One to one)
3. CC ---------- CC(2) (Many to one)
4. CC --------- Corporate\_Non corporate (Many to one)
5. CC ------------Policy Master (Many to one)
6. CRS\_SQL ------ Lives and premium (Many to one)
7. Date ---------- Enrollment(2) (One to One)
8. CRS\_SQL ------ Relationship Master (many to one)
9. Dump data ------- Buffer Utlization (Many to One)
10. Dump Data ----- Disease Master (Many to One)
11. Dump Data ---------Enrollment (Many to one)
12. Dump Data ---------Policy Master (Many to Many)
13. Enrollment ---- Corporate\_Non corporate (Many to One)
14. Enrollment -------Relationship Master (Many to one)
15. Enrollment (2) ------ CC (2) (Many to one)
16. Enrollment (2) ------ Lives and premium(Many to one)
17. Query1 (deductions) ------ Lives and premium (Many to one)

Table Classification:

Fact tables – Dump data, lives and premium, CC

Dimension tables – Disease master, policy master, deduction master, Relation master, CRS SQL, CSAT, Deduction Dump, Client Type.

Other tables – date, Enrollment 2, IPD/OPD, Buffer Utilization

Table Schema: This data model uses Galaxy schema structure (Multiple facts and dimension tables)

* + **Data Transformations:**
    - Basic power query transformations are:

1. Use first row as headers
2. Removing unnecessary columns
3. Trim and concatenating columns
4. Adding conditional columns
5. Replacing values and correcting basic data errors (spelling mistakes, extra spaces
6. Data type changes
7. **Visualizations**
   * **Key Visuals:**
     + Key visuals used for the story telling are
8. Donut chart
9. Pie Chart
10. Clustered Column chart
11. Bar chart
12. Column chart
13. Table and Matrix
14. Line and clustered Column chart
15. Cards and multi row card.
16. Funnel
17. Line chart
    * **Interactive Elements:**
      + Page level and visual level filters are used throughout the report.
    * **Drillthroughs:**
      + Not applicable
18. **Calculations and Measures**
    * **Key Measures:**
    * Aggregate functions used for measures are
19. Sum
20. \* (Multiply)
21. Divide
22. Count

* Iterative functions

1. Sumx and countx
2. Earlier
3. Rankx

* Filter functions

1. Calculate
2. Use relationship
3. Filter
   * **Calculated Columns:**
     + Age Band
     + SI Band
     + Concatenated Columns (CCN+Lodgetype+Lodgedate…etc)
     + TAT Band
4. **Report Interactivity**
   * **User Interactivity:**
     + As the report is static and delivery is in presentation format, no user interactivity is introduced to the report.
   * **Bookmarks and Buttons:**
     + As the report is static and delivery is in presentation format, no user interactivity is introduced to the report.
5. **Report Performance**
   * **Optimizations:**
     + Powerbi tools as DAX Studio and tabular editor are used for better model performance and report optimization

DAX Studio – DAX editing, Query execution, Performance tuning, Query execution tracing, Query plan analysis, Extended DAX functionality.

Tabular editor – Tabular model development, Advanced DAX editing, Bulk Operations, Version Control integration, Schema comparison, Query execution and profiling.

* + **Considerations:**
    - Data Quality
    - Aggregations
    - Sorting and Indexing
    - Query folding
    - Data preview and cleanup
    - Parallel loading
    - Data source filters

1. **Security**
   * **Row-Level Security (RLS):**
     + Not applicable
   * **Data Encryption:**
     + For countable visuals in Daily Outstanding Communication, data is encrypted in pdf publications.
2. **Deployment and Sharing**
   * **Power BI Service:**
     + Presentations are revised using PowerBI Service by publishing them.
     + Daily Pdf Files are published for daily communications ( CSat, Outstanding Analysis)
     + Limitation – Only 50 pages can be published at a time.
   * **Embedding:**
     + Embedding reports are applicable to Screen presentations (Audit analysis, Csat, Training, Top Brokers and Corporates, Outstanding and Settled claims analysis)
     + Steps to follow:

* Install Gateway requirements (standard Gateway)
* Enabling Scheduled Refreshes and check for data updates
* Limitations: Scheduled Refreshes can fail
* Slideshow option cant be loaded in powerbi embedded reports.

1. **Maintenance and Updates**
   * **Data Updates:**
     + Data and report maintenance is expected for every month (Monthly Analysis)
     + Iterations and Improvements are considered on monthly intervals.
   * **Version Control:**
     + Describe the version control process for the report.
2. **Support and Contacts**
   * **Support Contacts:**
   * **Training Materials:**
     + Reference Files for Measures and Dax

* Year to year analysis (TATA Brokers Analysis)
* Quarter wise analysis (TATA Brokers Analysis )
* 2 Years Performance Analysis (ITGIC Analysis)
* 3 years Performance Analysis (City Bank Analysis)
* TAT Analysis (TATA Brokers analysis)
* Brokers and Corporates Master File

**Review and Approval**

* **Review Date:**
* **Reviewers:**
* **Approval:**

**Version History**

* **Version 1.0: [Date]**
* Initial release.