Persistency of Drug – Healthcare Project

Team Member Details

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Problem Description

 One of the major challenges for pharmaceutical companies is to understand the persistency of drug usage as prescribed by physicians. Patients often discontinue treatment prematurely, impacting health outcomes and business performance.

• Objective:

ABC Pharma has approached an analytics company to automate the identification of drug persistency patterns and to build a predictive model that can classify patients as persistent or not, based on demographic, clinical, and treatment-related factors.

Business Understanding

Drug persistency directly impacts:

- Patient Health Outcomes Better adherence leads to improved treatment effectiveness.
- **Pharma Company Revenue** Persistent patients generate higher long-term prescription revenue.
- Physician Insights Helps physicians understand risk segments and improve care strategies.

By solving this problem, ABC Pharma can:

- Identify patients at high risk of non-persistency.
- Target interventions to improve patient adherence.
- Optimize marketing and physician engagement strategies.

Project Lifecycle & Deadlines

- 1. Problem Understanding & Business Goal Definition Week 7
- 2. **Data Understanding** Week 8
- 3. Data Cleaning & Feature Engineering Week 9
- 4. Exploratory Data Analysis (EDA) Week 10
- 5. **Model Development** Week 11
- 6. Model Selection & Evaluation Week 12
- 7. **Deployment (Prototype Model)** Week 13
- 8. Final Report & Presentation Week 13