

**Team member's details:****Group Name:** Data Dominators

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**Project: Data Science:: Healthcare - Persistency of a drug****Problem description**

We are building a predictive model that classifies patients into “persistent” or “non-persistent” categories based on factors like their demographics, medical history, physician characteristics, and treatment details. Factors like the patient level such as their age, risk factors, previous test results, or provider type allows for insights into why some patients continue therapy while others drop off. Thus understanding “persistence” levels. By analyzing these data points and finding patterns, the predictive model helps explain patient behavior and supports the creation of targeted interventions to improve adherence.

**Business understanding**

From a business perspective, the pharmaceutical company wants to identify which patients are likely to remain on their prescribed medication for the long term. This knowledge can help them tailor their patient outreach programs, provide better support or educational materials, and allocate resources efficiently to improve adherence. Improved medication persistence means patients get better health outcomes, which can enhance the company’s reputation, ensure steady revenue streams from continuous drug use, and guide strategic decisions like marketing, distribution, and product development.

### Project lifecycle along with the deadline

Weeks	Date	Plan
Week 7	19 Dec 2024	Create a GitHub repository and create a data intake report.
Week 8	26 Dec 2024	Business and Data understanding.
Week 9	2 Jan 2025	Data cleaning and transformation.
Week 10	9 Jan 2025	Perform EDA.
Week 11	16 Jan 2025	EDA Presentation.
Week 12	23 Jan 2025	Construct models.
Week 13	30 Jan 2025	Create presentation slides and present the best solution.