Project: Healthcare - Persistency of a drug

Week 7 Deliverables

Batch code: LISUM20

Submission date: 18th May 2023

Submission to: Data Glacier

Project Team:

Group Name: Ensemble Elites				
Name	**Email**	**Country**	**College/Company**	**Specialization**
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Problem Description:

ABC Pharma is facing a significant challenge in understanding the persistency of drug usage as per physician prescriptions. The persistency of drug usage refers to the extent to which patients continue to take their prescribed medications over a specific period of time.

Currently, ABC Pharma Company relies on manual methods to track and analyze drug persistency. This involves reviewing patient records, conducting surveys, and relying on self-reporting, which can be time-consuming, prone to errors, and lack real-time insights.

To address this challenge, ABC Pharma Company has decided to approach an analytics company to automate the process of identifying drug persistency. The goal

is to develop a data-driven solution that can accurately and efficiently track the usage of prescribed medications by patients, enabling ABC Pharma Company to gain valuable insights into the patterns of medication adherence.

Business Understanding:

By automating the identification of drug persistency, ABC Pharma Company aims to achieve several objectives. First, they want to understand the extent to which patients adhere to their prescribed medication regimens. This information will help them access the effectiveness of their drugs and identify any potential issues or barriers to adherence.

Second, ABC Pharma Company wants to identify patterns or trends in drug persistency across different patient groups, geographical locations, or disease conditions. These insights will enable them to tailor their marketing and educational efforts to improve medication adherence and patient outcomes.

Finally, automating the identification of drug persistency will allow ABC Pharma Company to gather real-time data, enabling them to proactively intervene when patients show signs of non-adherence. This can include targeted reminders, educational materials, or support programs to help patients stay on track with their prescribed medications.

In conclusion, by leveraging analytics and automation, ABC Pharma Company aims to enhance their understanding of drug persistency, improve patient adherence, and ultimately optimize the effectiveness and impact of their pharmaceutical products.

Project Lifecycle:

Week	Due date	Task
Week 7	19th May 2023	Problem description, data Intake report
Week 8	26th May 2023	Data analysis/preprocessing
Week 9	2nd June 2023	Data Cleansing and Transformation
Week 10	9th June 2023	Exploratory data analysis and Final recommendation
Week 11	16th June 2023	EDA presentation and proposed modeling technique
Week 12	23rd June 2023	Model Selection and Model Building
Week 13	30th June 2023	Final Project Report and Code

Data Intake report:

Name: Healthcare – Persistency of a drug

Report date: May 19, 2023

Internship Batch: LISUM20

Version: 1.0

Data intake by: Ensemble Elites

Data intake reviewer: Nwankwo Ezinne Anasthecia

Data storage location: https://github.com/bmusham/Healthcare-Persistency-of-a-drug/blob/main/Healthcare_dataset.xlsx

Tabular data details:

Total number of observations	3424
Total number of files	1
Total number of features	69
Base format of the file	.xlsx
Size of the data	898 KB

Proposed Approach:

- There are no missing values in the dataset.
- There are no duplicate values in the dataset.

GitHub Repo Link:

https://github.com/bmusham/Healthcare-Persistency-of-a-drug