

## Drug Persistence Classification

Created by Pharmalytics

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ABC Pharma is a pharmaceutical company looking to improve their patient identification process. They hope to improve their reach to customers by targeting more specific groups of people who they believe would be potential drug patients. We hope to automate the process of predicting drug persistence by creating a classification model which uses past patient data to predict whether or not a patient was persistent in taking a drug for its prescribed course.

The data we are using to create the model was given to us by ABC Pharma. It is an .xlsx file which contains demographic and other information on 3424 patients, as well as whether or not each patient was flagged as “persistent”, meaning they took a drug from ABC Pharma for the full prescribed duration.

There are no major issues with the data, the only issue is that some of the entries are marked ‘Unknown’. Our model was tested in a few ways. The first way included these patients with ‘Unknown’ entries and the second ignored them. The model ended up performing better when they were left in. Another thing we are trying to do is impute some of the data to try and improve the accuracy of our model.

Link to GitHub repository: <https://github.com/noahigram/Pharmalytics>