Health Care Provider Fraud Detection Insured with Medicare (Damayanti Naik)

How Medicare can increase its Health care fraud detection capability by 10%, based on the claims provided by the healthcare with Beneficiaries' profiles, health status, Insurance details, diagnostics/procedures carried out on them.

1. Context

Medicare, US Federal Government Health plan for ederly people receives many fraudulent claims from health care providers. This leads insurance companies to increase their premiums, making medical care highly expensive. Rigorous Data analysis and many Machine Learning Models based on health care providers' claim can discern the indulged personnels. So, to increase the Fraud detection capability by 10% a model will be built and deployed.

2. Criteria for success

The ROC AUC score (Receiver Operating Characteristic - Area Under Curve score) of the prediction/classification algorithm will be at least 95% and completed by the end of 2021.

3. Scope of Solution Space

A classification algorithm will be developed, based on the data available and deployed in the Medicare Fraud detection system.

4. Constraints within solution space

Physicians' and Health care providers' details are missing from the dataset.

5. Stakeholders to provide key insight

1. Head of Medicare Fraud detection group
2. Employees in the Medicare Fraud detection group
3. Medicare card holders

6. Key data sources

Datasets containing health details of Medicare beneficiaries (i.e Medicare card holders), claim details, diagnosis/procedure codes, Physicians, states, races and counties.