Teams Members:

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Summary: Health care industry is huge and there is lot of data coming out of health care. US health care is very expensive the overall spending is 3.8 Trillion dollars per year. There is massive waste in US health care. The estimated waste in US health care is \$765 billion dollars per year. Not only cost is an issue, but the quality of the health care is poor. In this project we will be focusing on getting better care and lower cost for the people.

Project Title: Health Care Analytics

Technologies Used for project: Version Control: GitHub, Big Data Technologies: Scala and

Python, Visualization: Python, Testing: Java

Project Deliverable's: (V1)

1) Total coverage of people who are covered and not covered by insurance

- 2) Total amount spent on the family for the health care
- 3) Selecting the physician's location and the amount of coverage of insurance the physician provides (Health insurance cost prediction)
- 4) Selecting insurance based on location.

Data Sets:

- 1) Health Insurance coverage people enrolled per year: https://www.kaggle.com/hhs/health-insurance
- 2) Medical Cost Data set: https://www.kaggle.com/mirichoi0218/insurance
- 3) Hospital specific charges: https://data.cms.gov/Medicare-Inpatient/Inpatient-Prospective-Payment-System-IPPS-Provider/97k6-zzx3
- 4) The cost of scan the amount of money paid by the patient after deducting the amount from the insurance company Covering Data set from 2012 to 2017 link:

 https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/Physician-and-Other-Supplier.html
- 5) The cost of Medical equipment's paid by patient after deducting the amount from insurance company- Covering Data set from 2012 to 2017 link: https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/DME.html
- 6) Patient satisfaction score for a Hospital:

 https://data.medicare.gov/Hospital-Compare/Hospital-Value-Based-Purchasing-HVBP-Safety/dgmq-aat3
- 7) Physicians specialty by location: https://data.medicare.gov/Physician-Compare/Physician-Compare-National-Downloadable-File/mj5m-pzi6

8) Health insurance coverage based on state: https://www.healthcare.gov/health-and-dental-plan-datasets-for-researchers-and-issuers/

Reference: https://guides.lib.berkeley.edu/publichealth/healthstatistics/rawdata