

CS 699 Project Proposal

Team Members:

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Title:

Heart Attack or myocardial infarction detection.

Dataset details:

This dataset has been taken from CDC website

https://www.cdc.gov/brfss/annual_data/annual_2020.html. The original dataset had many variables which were not related to heart attack detection, so we have removed those variables. The final dataset now has 25 variables in total of which 1 is the class variable. The dataset has 401,950 rows of data. The following table contains the description of each of the variables (the variable highlighted in **yellow** is the class variable):

Variable Name	Variable Description
GENHLTH	Would you say that in general your health is: 1: Excellent, 2: Very Good, 3: Good, 4: Fair, 5: Poor, 7: Don't know / Not sure, 9: Refused, BLANK: Not asked or missing
PHYSHLTH	Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good? 1 – 30: Number of days, 88: None, 77: Don't know / Not sure, 99: Refused, BLANK: Not asked or missing
MENTHLTH	Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good? 1 – 30: Number of days, 88: None, 77: Don't know / Not sure, 99: Refused, BLANK: Not asked or missing
POORHLTH	During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation? 1 – 30: Number of days, 88: None, 77: Don't know / Not sure, 99: Refused, BLANK: Not asked or missing
HLTHPLN1	Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare, or Indian Health Service? 1: Yes, 2: No, 7: Don't know / Not sure, 9: Refused, BLANK: Not asked or missing

PERSDOC2	Do you have one person you think of as your personal doctor or health care provider? (If 'No' ask 'Is there more than one or is there no person who you think of as your personal doctor or health care provider? '.) 1: Yes, 2: No, 7: Don't know / Not sure, 9: Refused, BLANK: Not asked or missing
MEDCOST	Was there a time in the past 12 months when you needed to see a doctor but could not because of cost? 1: Yes, 2: No, 7: Don't know / Not sure, 9: Refused, BLANK: Not asked or missing
CHECKUP1	About how long has it been since you last visited a doctor for a routine checkup? [A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition.] 1: Within past year (anytime less than 12 months ago), 2: Within past 2 years (1 year but less than 2 years ago), 3: Within past 5 years (2 years but less than 5 years ago), 4: 5 or more years ago, 7: Don't know / Not sure, 8: Never, 9: Refused, BLANK: Not asked or missing
EXERANY2	During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise? 1: Yes, 2: No, 7: Don't know / Not sure, 9: Refused, BLANK: Not asked or missing
SLEPTIM1	On average, how many hours of sleep do you get in a 24-hour period? 1 – 24: Number of hours [1-24], 77: Don't know/Not Sure, 99: Refused, BLANK: Missing
CVDSTRK3	(Ever told) (you had) a stroke. 1: Yes, 2: No, 7: Don't know / Not sure, 9: Refused, BLANK: Not asked or missing
ASTHMA3	(Ever told) (you had) asthma? 1: Yes, 2: No, 7: Don't know / Not sure, 9: Refused, BLANK: Not asked or missing
ADDEPEV3	(Ever told) (you had) a depressive disorder (including depression, major depression, dysthymia, or minor depression)? 1: Yes, 2: No, 7: Don't know / Not sure, 9: Refused, BLANK: Not asked or missing
EDUCAG	What is the highest grade or year of school you completed? 1: Did not graduate High School, 2: Graduated High School, 3: Attended College or Technical School, 4: Graduated from College or Technical School, 9: Don't know/Not sure/Missing
EMPLOY1	Are you currently...? 1: Employed for wages, 2: Self-employed, 3: Out of work for 1 year or more, 4: Out of work for less than 1 year, 5: A homemaker, 6: A student, 7: Retired, 8: Unable to work, 9: Refused, BLANK: Not asked or missing
INCOMG	Income categories 1: Less than \$15,000, 2: \$15,000 to less than \$25,000, 3: \$25,000 to less than \$35,000, 4: \$35,000 to less than \$50,000, 5: \$50,000 or more, 9: Don't know/Not sure/Missing
PREGNANT	To your knowledge, are you now pregnant? 1: Yes, 2: No, 7: Don't know/Not Sure, 9: Refused, BLANK: Not asked or missing

DIFFWALK	Do you have serious difficulty walking or climbing stairs? 1: Yes, 2: No, 7: Don't know/Not Sure, 9: Refused, BLANK: Not asked or missing
DIFFALON	Because of a physical, mental, or emotional condition, do you have difficulty doing errands alone such as visiting a doctor's office or shopping? 1: Yes, 2: No, 7: Don't know/Not Sure, 9: Refused, BLANK: Not asked or missing
SEX	Calculated sex variable, 1: Male, 2: Female
AGEG5YR	Fourteen-level age category 1: Age 18 to 24, 2: Age 25 to 29, 3: Age 30 to 34, 4: Age 35 to 39, 5: Age 40 to 44, 6: Age 45 to 49, 7: Age 50 to 54, 8: Age 55 to 59, 9: Age 60 to 64, 10: Age 65 to 69, 11: Age 70 to 74, 12: Age 75 to 79, 13: Age 80 or older, 14: Don't know/Refused/Missing
BMI5CAT	Four-categories of Body Mass Index (BMI) 1: Underweight, 2: Normal Weight, 3: Overweight, 4: Obese, BLANK: Don't know/Refused/Missing
SMOKER3	Four-level smoker status: Everyday smoker, Someday smoker, Former smoker, Non-smoker 1: Current smoker -now smokes every day, 2: Current smoker -now smokes some days, 3: Former smoker, 4: Never smoked, 9: Don't know/Refused/Missing
RFDRHV7	Heavy drinkers (adult men having more than 14 drinks per week and adult women having more than 7 drinks per week) 1: No, 2: Yes, 9: Don't know/Refused/Missing
CVDINFR4	(Ever told) you had a heart attack, also called a myocardial infarction? 1: Yes, 2: No, 7: Don't know / Not sure, 9: Refused, BLANK: Not asked or missing

The final dataset is also attached with proposal.