QUICK QUESTION 4.1 (1/1 point)

In R, create a logistic regression model to predict "PoorCare" using the independent variables "StartedOnCombination" and "ProviderCount". Use the training set we created in the previous video to build the model.

If you haven't already loaded and split the data in R, please run these commands in your R console to load and split the data set. Remember to first navigate to the directory where you have saved "quality.csv".

```
quality = read.csv("quality.csv")

install.packages("caTools")

library(caTools)

set.seed(88)

split = sample.split(quality$PoorCare, SplitRatio = 0.75)

qualityTrain = subset(quality, split == TRUE)

qualityTest = subset(quality, split == FALSE)
```

Then recall that we built a logistic regression model to predict PoorCare using the R command:

```
QualityLog = glm(PoorCare ~ OfficeVisits + Narcotics, data=qualityTrain, family=binomial)
```

You will need to adjust this command to answer this question, and then look at the summary(QualityLog) output.

What is the coefficient for "StartedOnCombination"?

1.95230 =

1.95230

Answer: 1.95230

EXPLANATION

To construct this model in R, use the command:

```
Model = glm(PoorCare ~ StartedOnCombination + ProviderCount, data=qualityTrain, family=binomial)
```

If you look at the output of summary(Model), the value of the coefficient (Estimate) for StartedOnCombination is 1.95230.

Check Save Hide Answer *You have used 1 of 5 submissions*

QUICK QUESTION 4.2 (1/1 point)

StartedOnCombination is a binary variable, which equals 1 if the patient is started on a combination of drugs to treat their diabetes, and equals 0 if the patient is not started on a combination of drugs. All else being equal, does this model imply that starting a patient on a combination of drugs is indicative of poor care, or good care?

- (•) Poor Care ✔
- ( ) Good Care

EXPLANATION

The coefficient value is positive, meaning that positive values of the variable make the outcome of 1 more likely. This corresponds to Poor Care.

Hide Answer *You have used 1 of 1 submissions*

EdX is a non-profit created by founding partners Harvard and MIT whose mission is to bring the best of higher education to students of all ages anywhere in the world, wherever there is Internet access. EdX's free online MOOCs are interactive and subjects include computer science, public health, and artificial intelligence.