



#### Keeping an Eye on Healthcare Costs:

<u>Course</u> > <u>Unit 4: Trees</u> > <u>The D2Hawkeye Story</u>

> Quick Question

### **Audit Access Expires Aug. 12, 2019**

You lose all access to this course, including your progress, on Aug. 12, 2019.

# **Quick Question**

## **Quick Question**

0/1 point (graded)

In the previous video, we constructed two CART models. The first CART model, without the loss matrix, predicted bucket 1 for 78.6% of the observations in the test set. Did the second CART model, with the loss matrix, predict bucket 1 for more or fewer of the observations, and why?

- According to the penalty matrix, some of the worst types of errors are to not predict bucket 1 when the actual cost bucket is bucket 1. Therefore, the model with the penalty matrix predicted bucket 1 more frequently.
- According to the penalty matrix, some of the worst types of errors are to predict bucket 1 when the actual cost bucket is higher. Therefore, the model with the penalty matrix predicted bucket 1 more frequently.
- According to the penalty matrix, some of the worst types of errors are to not predict bucket 1 when the actual cost bucket is bucket 1. Therefore, the model with the penalty matrix predicted bucket 1 less frequently.
- According to the penalty matrix, some of the worst types of errors are to predict bucket 1 when the actual cost bucket is higher. Therefore, the model with the penalty matrix predicted bucket 1 less frequently.

### **Explanation**

If you look at the classification matrix for the second CART model, we predicted bucket 1 less frequently. This is because, according to the penalty matrix, some of the worst types of errors are to predict bucket 1 when the actual cost bucket is higher.

Submit

You have used 1 of 1 attempt

**1** Answers are displayed within the problem

© All Rights Reserved