

LSC 563: Exercise 3/4 (Spring 2020)

This case study was adapted from: Marlene Smith, University of Colorado Denver Business School.

Background

According to a recent study published in the US News and World Report the cost of medical malpractice in the United States is \$55.6 billion a year, which is 2.4 percent of annual health care spending. Another 2011 study published in the New England Journal of Medicine revealed that annually, during the period 1991 to 2005, 7.4% of all physicians licensed in the US had a malpractice claim. These staggering numbers not only contribute to the high cost of health care, but the size of successful malpractice claims also contributes to high premiums for medical malpractice insurance.

The Data

The data set has information about the last 118 claim payments made, covering a six-month period. The eight variables in the data table are described below:

Variable Name	Description
Amount	Amount of the claim payment in dollars
Severity	The severity rating of damage to the patient, from 1 (emotional trauma) to 9 (death)
Age	Age of the claimant in years
Private Attorney	Whether the claimant was represented by a private attorney. 1 = private, 0 = Not private.
Marital Status	Marital status of the claimant. 0 = Divorced, 1 = Single, 2 = Married, 3 = Widowed, 4 = Unknown.
Specialty	Specialty of the physician involved in the lawsuit
Insurance	Type of medical insurance carried by the patient
Gender	Patient Gender

The Task

Your client is an insurance company that wants to develop a better understanding of its claims paid out for medical malpractice lawsuits. Its records show claim payment amounts, as well as information about the presiding physician and the claimant for several recently adjudicated or settled lawsuits.

- All work must be performed in Tableau
- Screenshots for the data processing steps are not required. However, you must document the steps taken in the written report (See Sections for the Written Report, below)

Step 1: Process Data

Based on what you have learned this semester, explore the data. This data might need to be cleaned, processed, or re-coded before you can generate meaningful graphs.

Step 2: Visualize the Data

Based on what you have learned this semester, **identify two factors** that appear to address the needs of the client.

Sections for the Written Report

Note: You will be graded using the same point systems as outlined in the Exercise Rubric. However, the **format that you use is different**. The report you submit to Blackboard should follow this format

1. No specific word count. However, please try to keep the report under 1000 words
2. Includes a section on data processing and exploration.
 - a. Think about what you and your team would need (in terms of the data) to develop the graphs.
 - b. Consider what was required for Exercises 1 and 2, class discussions, and labs.
3. A complete description of the graphs that you developed. You might want to briefly discuss other options that you explored. However, the Tableau workbook that you submit will only have 2 graphs.
4. Problems that you encountered
5. Any implications and/or recommendations for the client

Submitting the Work to Blackboard

1. Create a **Word document** that provides a narrative summary of your work. Save your document using the following naming convention. For example, if I were submitting the document to Blackboard, I would name my file: **joubertd_exercise03_04**.
2. You will also need to submit a Tableau workbook that contains the processed data and the 2 graphs that you created. Save your workbook using the following naming convention. For example, if I were submitting the Tableau workbook to Blackboard, I would name my file: **joubertd_exercise03_04.twbx**.