Case: Exploratory Data Analysis of Lawsuit

The Problem

An insurance company wants to know more about the amount of claims it pays out for medical malpractice lawsuits. The data table, taken from recently adjudicated or settled lawsuits, shows claim payment amounts, the specialty of the presiding physician, and information about the claimant or patient. Summarize the data. What factors influence payments for medical malpractice?

Data Table Lawsuits.xlsx

The data table contains a random sample of 118 claim payments. The variables in the data table are:

Payment Amount of the payment in thousands of dollars

Severity An estimate of the severity of damage to the patient:

- 1 = emotional trauma
- 2 = insignificant damage
- 3 = minor temporary damage
- 4 = major temporary damage
- 5 = minor permanent damage
- 6 = significant permanent damage
- 7 = major permanent damage
- 8 = grave damage
- 9 = death

Age Age of the patient in years

Private Attorney Whether the claimant was represented by a private attorney (1 = private attorney, 0 = not a private attorney)

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 Gender of the patient

Perform an exploratory data analysis using all the tools we learned from descriptive statistics chapter on this Help Desk data, and decide

- 1) What to Report to Management?
- 2) What factors influence payments for medical malpractice?
- 3) what're your recommendations?