

PHPM 631 Lab 3: Data to Decision
Due date: Submit on E-Campus by 11:59pm Sunday 2/9

Submission: Submit to Assignments/Lab 3: Data to Decision

- Submit a word document with the following two items
 - screen shot of your dashboard with the two graphs you created
 - Look at your results, and answer the following questions
 - How many total beds (“totbeds”) and of these how many are classified as general beds (“general”) are there?
 - How many beds does the largest hospital in the dataset have?
 - How many unique counties are shown within the dataset?
 - Which years are contained within the dataset?
 - Do more hospitals contain specialty beds or non-specialty beds?
 - Which type of hospitals, which include specialty beds, have the most total beds? Is this type different for hospitals that include no specialty beds?
 - In all hospitals, which two proportions of beds are most likely to be classified as general?

Guideline for assignment grading

- This is a 0/1 grading based on timely submission. What follows is an exercise to build upon skills from lab 1 and 2 using Tableau

Objective

By the end of this lab, you should be able to:

- In Tableau:
 - Create new calculated variables
 - Use sets to create graphs
 - Examine distributions and handle missing data

Lab 3: Data to Decision

Follow the step by step directions below and submit your screen shot when you are done.

1. Download the data from the class website
2. Complete the tableau exercise, answer corresponding questions, and submit

Tableau

Load Dataset

1. Load the “aha_basic” file to Tableau.

Create a new calculated field using if...else

1. In the top bar menu select: Analysis --> Create Calculated Field
2. In the dialogue box that appears type: “specBed” into the top empty box
3. In the field below type: “if ((int(psych+accute+peds+ob) = 0)AND(other = 0)) then 0 elseif (int(psych+accute+peds+ob) = 0)AND(other != 1) then 1 else 2 end”
4. Notice the bottom left which now shows “The calculation is valid.” and hit “OK”

- Click on the “Data Source” Tab at the bottom of the screen, and scroll all the way to the right to find your new variable “specBed” with 0’s, 1’s, and 2’s

Create Sets by your New Variable

- Drag “Totbeds” in the “Measures” pane to the “Columns” box at the top
- Drag “Htype” under “Dimensions” to the “Rows” box at the top
- Drag “specBed” into the “Filters” field in the middle
- When the filter field dialog box appears click on “All values” then “Next >”
- Ensure the range of values is 0 to 2, then hit “OK”
- Click on the carrot in the right of specBed and click on “Create Set”
- In the dialogue box click on 0 and 1 and rename “noSpecBed”
- Click on the carrot in the right of specBed and click on “Create Set”
- In the dialogue box click on 2 and name “specBeds”
- Remove “specBed” from the filter by click on the carrot and click “Remove”
- Drag “noSpecBed” to the filter and watch the total number of beds change
- Remove “noSpecBed” from the filter
- Drag the set “noSpecBed” to the “Column” box and watch the bar chart change to compare between the number of beds with hospitals that have no specialty beds (“IN”) and those that have beds (“OUT”)

Create a Distribution of a Proportion of General Beds to Total Beds

- Click on create new sheet tab using the tab on the bottom
- Click on the “Analysis” in the top menu then “Create calculated field”
- In the box that appears type in “percGen” in the top box and “general/totbeds” in the box below
- Click “OK”
- Click on “Show Me” and “percGen” under the header “Measures” on the left
- Select the “Histogram” under “Show Me” and watch as a histogram is calculated.
- Note in the corner there is a small gray “NULL” in the bottom right indicating there is a missing value from the dataset. Click on the bottom right small gray “NULL” value
- A dialogue titled “Special Values for [percGen(bin)]” pops up. Click on “Filter data” within the dialogue box

Create a dashboard

- Click on the new dashboard tab at the bottom (“plus/square”)
- Drop the two graphs you made onto the dashboard and take a screen shot of dashboard
- Copy screen shot into word document and answer questions below

Answer Questions and Submit

- Questions:
 - How many total beds (“totbeds”) and of these how many are classified as general beds (“general”) are there?
 - How many beds does the largest hospital in the dataset have?
 - How many unique counties are shown within the dataset?
 - Which years are contained within the dataset?
 - Do more hospitals contain specialty beds or non-specialty beds?
 - Which type of hospitals, which include specialty beds, have the most total beds? Is this type different for hospitals that include no specialty beds?

