# PHPM 631 Assignment 1: Data to Decision Due date: Submit on E-campus by 11:59pm Sunday 1/19 & 1/26

Submission. Submit on E-campus. See Requirements Section Below for details

- Week 1 (1/19): Progress Report in word
- Week 2 (1/26): Final Tutorial

Late Assignments: Each student will be allowed one late assignment, due 7 days from the due date. NO other late assignments or make up will be accepted.

## **Guideline for assignment grading (8%)**

- 70% (70 points): Bad ( $\sqrt{--}$ ) Did NOT follow all instructions
- 80% (80 points): Reasonable ( $\sqrt{-}$ ) Followed all instructions
- 90% (90 points): Good ( $\sqrt{}$ ) Followed all instructions, and did good work
- 100% (100 points): Great ( $\sqrt{+}$ ) Followed all instructions and did great work

### **Objective**

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

• develop stories using relevant data and evidence to support a decision

### Assignment: Data to Decision

For this assignment, you can use either excel or Tableau.

You are encouraged to work in a team of 3 for this assignment. If you do, all of you will receive the same grade for this part of the assignment. <u>Submit one assignment for the whole team</u>. BUT at the very top, clearly label that you worked as a team and the name and role of the team members. You may choose to work alone, but you will be expected to do the same amount of work as a team.

Privacy note, I will share good tutorials in class.

Assume you work for a non-profit organization that is promoting hospital transparency. The IT team has put together the following website (<u>http://www.txpricepoint.org/</u>) and launched it. You are asked to build a tutorial for the website that will be widely distributed among the public to promote the website.

#### **Recommended Action Plan**

- 1. [Build a Team] Form a group of 3 to work together, and divide up the work.
- 2. [Problem Statement] Pick an example question to answer using the website (e.g., what is the average cost of joint replacement in the Houston area?).
- 3. [Understand the Decision Maker] The decision-maker in this case is the consumer/patient/caregiver. You may reduce the scope by making an assumption about who they are (e.g., patients needing a joint replacement). <u>Make sure to state all your assumptions in an appendix</u> (which will not be part of the tutorial) that will be submitted to me. If there is any part of the assumptions that needs to be conveyed to the public, remember to include these data/facts in the main tutorial.
- 4. [Feature selection] Figure out what data you need to answer the question
- 5. [Data Analysis] Find the data you need, and analyze the data to answer the question based on evidence from the website.
- 6. [Develop a Story] Using the data you analyzed to arrive at your answer, develop a story in the form of a tutorial. Use effective graphs and visualizations to convey your results.
- 7. [Build the Tutorial] Write up a tutorial on the full process to be shared with the public at large. Your goal is to have the public learn from your tutorial,
  - a. First, how to follow along with your steps and reproduce the analysis you did
  - b. Second, by doing so understand how to best use this website
- 8. Make sure to review the requirements sections.



## **Required Submissions**

- 1. Write a tutorial for the general public for using the following website (<u>http://www.txpricepoint.org/</u>) by selecting an example problem to answer using this data, and answering the question using either excel or tableau, then writing up instructions on how someone can follow along and replicate your analysis.
- 2. Progress Report
  - a. This is an informal memo to me. Submit a word document.
  - b. It needs to include information about
    - i. Team members
    - ii. What example question you will try to answer using the website
    - iii. The tentative list of data (features) you plan to analyze.
    - iv. [Optional] any plans on the data analysis you have
- 3. Final Tutorial
  - a. The report should include an overview of no more than 350 words
  - b. The report must include at least 5 figures
  - c. The full tutorial should be no more than 5 pages (not including the appendix)
  - d. [Appendix 1] Include an excel or tableau file, one sheet per figure that has the data that generated the figure
  - e. [Appendix 2] Remember to include the assumptions you made

