Design Plan Worksheet

MSDS 6110 Fall 2015

Please fill out the following worksheet and submit it to the course website by September 20 at 11:59 p.m. in your local time zone.

1. Type the title of your project in the space below. The title can change as you learn more about your data. However, this will be the title for the purposes of grading.

Ethics in healthcare and what we can find in data

1. Please type the names of the group members below. By having your name on this form, you signify that you have contributed to and approve of this design plan.
   1. Andrew Clark
   2. Rahn Lieberman
   3. Ryan Shuhart
   4. Thomas Rogers
2. Type the research question below. The research question must be a hypothesis that is testable with data.

Can any trends on healthcare risks be seen based on demographic information (age, race, gender, etc.) that could show differences of quality of care for different ethnic groups?

1. Who or what is the target population for the study?

Diverse populations in the US. This could be specific races, genders, etc.

1. Who or what are your subjects? How will you randomize items to different treatment groups (if appropriate)?

Subjects are a random sampling of respondents from the BRFSS dataset.

1. What is (are) the response variable(s) for your study? Is each one categorical or quantitative? How do you plan to measure/gather this variable?

TBD

1. Please describe your sampling plan, including the mechanism you will use for random sampling of subjects from the population. Are you going to block for certain variables?
2. What explanatory variables will be measured/gathered to test the hypothesis? Please fill out the table below. The first two rows are given as examples. You can delete them when you type in your own variables. The point is to agree among group members about how you will measure each variable, particularly ones that defy measurement (e.g. motivation, likability, beauty, etc). The range is “expected” because it is possible that you might find a subject whose characteristics are outside the range of what you expected. That’s OK. Add as many rows as you need. Any blocking variables should be denoted with a \*.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Variable Name | Type | Units | Expected Range | Definition |
| Age | Quantitative | Years | 35 – 75 | Age on 8/31/15 |
| Physical Condition | Qualitative | N/A | Good/Bad | Good = resting heart rate of 89 or lower, Bad = resting heart rate of 90 or more. |
|  |  |  |  |  |

1. What problems do you foresee in the data gathering process? How do you plan to address them?
2. What methods of analysis do you plan to use? Explain your reasoning.