Pre-Interview Analytics Case Study

Instructions

1. The analytics case study should be completed prior to your interview. The exercise is meant to test your analytical approach and is not comprehensive. You will have 3 hours to complete the exercise and return your prepared materials back to your interview contact.
2. Included in this package is a description of the case study, a series of guiding focus questions and the accompanying dataset.
3. One of your interviews will focus on a review of this analytics case study. In the interview you will be asked to walk through your approach to answering the key questions posed in the study.
4. The focus areas are meant to help guide you through the exercise. You can expect the interviewer to ask you questions related to the focus areas, but also may ask questions outside of the focus areas.
5. **Please prepare materials to help explain your approach to the interviewer**. For example, you could prepare graphs or analyses that support the drivers you have identified and your recommendations.
6. **At the end of the 3 hour exercise, send your materials back to your interview contact.** We will print the materials and have them prepared for your interview.

Case Background & Key Questions

Flatiron Health Insurance (FHI) is a growing private healthcare insurance provider. They were founded on the premise that using data and analytics can improve the health insurance industry by providing better care and offerings to its patients. Every year, the [Center for Disease Control (CDC)](#) conducts surveys to understand the latest demographic, health, and fitness trends. You have been tasked with analyzing the recently published results of [this years' survey](#) and providing your recommendations back to the **Chief Analytics Officer** and **Chief Marketing Officer**. You have been assigned the task of taking a first look at the data and beginning to answer several key questions:

1) How does health status, represented by average number of days with bad physical health in the past month (PHYSHLTH), differ by state? Also provide an indication of distribution using whatever statistics you find suitable.
2) Digging deeper into the data, what are some factors that impact health (i.e. demographics, behaviors, previous illness, etc.)? Recommend how your findings could be used to target different groups of people with different insurance products.

To get you started, the IT department formatted the data set into a tab delimited text file for only NY, NJ, and CT (FHI's primary markets) found in the zip folder.

Focus Areas

1. Data understanding & quality
2. Analytical approach
3. Recommendations & relevance