

Ask the following questions and look for the answers using code and plots:

- Can you count something interesting?
 - i. From a list of 25+ questions by the CDC, a list of 22 interesting questions were sorted and a bar graph was made for each of these questions.
 - ii. From that list of 22 questions, 19 questions were deemed interesting enough to get a story out of it. For many of the questions, the story is multifaceted - in other words, I plan on analyzing the trends in the graphs together, instead of analyzing each graph independently.
 - iii. In terms of analysis, I will also pull background information online to justify some of my hypotheses/assumptions. Given that all of the question deals with State vs Mental/Physical Health, it is important to have an understanding of the factors that could potentially cause the differences seen in the bar graph.
 - iv. One thing I must note: this is a survey, so unfortunately I am relying on the respondents to not lie. But this is a core problem present with any survey type data, but this is something I will always keep in mind as I analyze these data.
- Can you find trends (e.g. high, low, increasing, decreasing, anomalies)?
 - i. From a list of 25+ questions by the CDC, a list of 22 questions with enough of a trend were chosen. These questions all have some sort of a trend so I can tell a story about them.
 - ii. In all, I estimate I could generate 5 stories from this dataset, some will be bigger than others.
- Can you make a bar plot or a histogram?
 - i. Yes, this bar plot was made for all 22 questions.
- Can you compare two related quantities?
 - i. This is the plan, I plan on analyzing related questions so to produce a holistic picture of what the data really shows about the states in question for the questions asked.
- Can you make a scatterplot?
 - i. I can, but it is not advised for this kind of data.
- Can you make a time-series plot?
 - i. Won't make sense for me to do it.

2. Looking at the plots, what are some insights you can make? Do you see any correlations? Is there a hypothesis you'd like to investigate further? What other questions do the insights lead you to ask?
- Point 1: A higher percentage of men on average are up to date on select clinical preventive services. Most notably Guam, Puerto Rico and Virgin Islands have the lowest percentage values for both men and women.
 - Point 2: I am looking into these questions below to make sense of some of the differences in the percentage of adults who need help and some of the possible underlying reasons:
 - i. Percentage of older adults currently not providing care who expect to provide care for someone with health problems in the next two years',
 - ii. Percentage of older adults who provided care for a friend or family member within the past month',
 - iii. Percentage of older adults who provided care to a friend or family member for six months or more',
 - iv. Percentage of older adults who provided care for someone with dementia or other cognitive impairment within the past month',
 - v. Percentage of older adults who report having a disability (includes limitations related to sensory or mobility impairments or a physical, mental, or emotional condition)',
 - vi. Percentage of older adults who reported that as a result of subjective cognitive decline or memory loss that they need assistance with day-to-day activities'
 - Point 2: I would hypothesize that the richer states would have a lower percentage of adults that need help, and the poor states, like Puerto Rico, Kentucky would have a higher percentage of adults that need help.
 - Point 2: However, just looking at the bar graph for **Percentage of older adults currently not providing care who expect to provide care for someone with health problems in the next two years** seems to contradict my hypothesis: Puerto Rico, one of the poorest US territories, have the lowest percentage of adults who needs help. Whereas New York, a comparably richer state, has a much higher percentage of adults who need help.
 - Point 2: This is why it is important for me to do some background research on some of the states - otherwise it could be hard to explain some of the differences in the data.
 - Point 3: for the rest of the questions, I will analyze the data and see if there is any interesting story I can make out of them.

3. Now that you've asked questions, hopefully you've found some interesting insights. Is there a narrative or a way of presenting the insights using text and plots that tells a compelling story? What are some other trends/relationships you think will make the story more complete?
- For this point, I would primarily look at the data from Point 2 in the section above and try to make a singular story about the health of older adults in the different US territories/States - in particular, between the rich and poor states but also in terms of their uniqueness (for example, out of the 165768 people on Guam, approximately 7000 are US military personnel) and how that might affect certain aspects of the population's health.
 - All the other questions would provide support, for or against my hypothesis for Point 2 above, and I would try to fit them into my finalized hypothesis of the differences in health of older adults in the different US territories/States.