2.10 Presenting Findings to Stakeholders

Links:

Tableau:
https://public.tableau.com/views/PreparingforInfluenzaSeason_16624140443520/Story1?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link
Video: https://vimeo.com/747446742

Script:

- Slide 1:

Every year, hundreds of thousands of people all across the United States catch the flu, especially during the "influenza season".

While the symptoms of the flu are an unfortunate hindrance for most, there are there are groups of people who are more at risk of developing severe flu symptoms requiring hospitalization or even death due to the flu. Those people are called "Vulnerable Populations". Vulnerable populations include adults over 65 years, children under 5 years, and pregnant women, as well as individuals with HIV/AIDs, cancer, heart disease, stroke, diabetes, asthma, and children with neurological disorders. However, for the purpose of this studies, vulnerable populations are people aged 5 and under, and 65 and over.

This analysis will look at the strain the flu season can potentially bring to medical organizations in an effort to allow medical staffing agencies to make data-backed decisions regarding staffing.

Description of image on Slide 1

- Slide 2:

Because the flu virus is present within US populations year-round, the actual start of the flu season usually follows an uptick in flu cases, flu related hospitalizations, and flu caused deaths.

This date that marks the beginning of the flu season varies from state to state depending on the different factors such as the states natural environment and population numbers. However, there is historically an increase in flu cases and deaths starting in November until March of the following year.

Discussion of the Line charts

- Slide 3:

Vulnerable populations (children younger than 5 years old, and Elders older than 65 years old) are by far the most affected by the flu and make up the largest number of flu related deaths. Across all US states, people who are a part of the vulnerable population die due to the flu more than all other age groups combined.

Discussion of the Bar and Pie Chart

- Slide 4:

After concluding that there is a positive correlation between the number of vulnerable people and the amount of flu deaths, it is imperative to include another variable of location in order to best fit the needs of this study.

Discussion of the Scatterplot and Combination Map

- Slide 5:

Conclusion. Every year, the flu season peaks from November to March and with this peak in cases comes a peak in flu related deaths. It has been determined that there is a strong positive correlation between the number of vulnerable people present within a population and the number of flu related deaths. Therefore, states with the highest number of vulnerable populations can be easily identified for medical staffing purposes.

Here is my recommendation. During the flu season, it would be of the greatest benefit to send additional medical staffing to states who have the largest population of vulnerable people. These states include (but are not limited to) California, Texas, New York, Pennsylvania, Florida, Illinois, and Ohio.

These additional medical staff should be deployed around November (at the earliest) and should be expected to provide medical assistance until at least March of the following year. By following these steps, medical staffing agencies will be well prepared to handle the influx of flu cases, fill in possible gaps in medical assistance, and hopefully provide enough extra care to those in need to decrease the number of flu deaths in the year.

Project Data Limitations

- Original data included “suppressed data”. The data represented fewer than ten people.
- Census data is based on self-reported surveys which contain a level of human error.
- Death certificate only lists a single underlying cause of death which can skew data.
- Definition of vulnerable population includes people with underlying health risks such as HIV/AIDS and pregnancy, however for this review only people within certain age brackets were considered “vulnerable”