2.10 Presenting Findings to stakeholders

PREPARING FOR INFLUENZA SEASON

Tableau Story: Task2.9 Preparing for Influenza season | Tableau Public

Vimeo Link: https://vimeo.com/782612895

Data limitations and Metrics

1. **Were there any limitations that prevented you from conducting an analysis?**

   Historical data from both datasets is restricted to the years 2009 to 2017. However, critical data regarding the COVID-19 crisis is not included. This has a significant impact because the coronavirus has affected the number of deaths due to influenza. Since the start of the covid pandemic, the timing and duration of flu activity have been less predictable (CDC). The analysis would have been more precise if the data had been more up-to-date. It would have been interesting to see how COVID affected the amounts of flu deaths.

2. **Did your data have any limitations that may have affected your results?**

   Most of the data (81.72%) were represented by the name "Suppressed". This value was not giving any numerical information. Therefore, there were missing data for the death column. Consequently, the value "Suppressed" was changed (which in the CDC database means statistics representing fewer than ten persons (0-9)) by taking the average between min (1) and max (9) values: average [(1+9)/2=5] (CDC).

3. **How might you monitor the impact of the staffing changes you recommended?**

   The best way would be to survey hospitals and clinics in the most populated states. It would be necessary to survey two times, before and after the staff additions.
   These surveys could be used to determine the effectiveness of the extra staffing additions. The monitoring would allow us to test if adding additional medical staff reduces influenza deaths.

4. **Is there a metric that could be used for monitoring this impact?**

- Survey results from hospitals and clinics (medical staff and patients) before and after the upcoming flu season
- Death rates for the upcoming flu season

Further Recommendations

For future analysis would be essential to include other variables which influence deaths due to influenza, for example, patients' data regarding living conditions, chronic illnesses (pneumonia, heart attacks and strokes, or other serious infections), pregnancy, obesity, etc., so that we can get more accurate results and, therefore, make even better predictions. In addition, it would be interesting to collect data regarding the number of hospitals per state, the number of staff per hospital, and how many patients come per day, which is the hospital's capacity.

Another exciting variable to relate to and include in this data would be the weather. Is there an increase in deaths when temperatures are below or above a certain degree? In addition, variables such as gender, poverty level, and geographical location (worldwide death variations due to influenza) could also be included to increase the quality of our results and give better recommendations.

Future analyses would be relevant to collect the missing information from 2018-2022. It would be essential to analyse the effect of COVID on the deaths in the different USA states.