Task 2.10

Mnguni Zulu

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Tableau Link:
https://public.tableau.com/views/2_9_PreparingfortheUpcomingInfluenzaSeason_Revised/Story1?:language=de-DE&publish=yes&:display_count=n&:origin=viz_share_link

Vimeo Link: https://vimeo.com/881139281/f10b3261f6?share=copy

1. **Video Script:**
   A) Hello everyone, I hope you´re well. My name is Mnguni Zulu and I´m going to be taking you through a presentation of insights and results from our data analysis.

   Let me share with you the overview of this project: Yearly there is an influenza season in the US, which sees more than usual, people suffer from influenza.

   The objective: to determine when to send staff, and how many to each of the states.

   Slide 1:

   - Read the title and give a brief description of the picture.
   - Point at line chart and point out fluctuations over time.
   - Different levels of deaths for different states. Affected by population size and…

   Slide 2:

   - Read title.
   - Thanks to stakeholder input we were able to identify age groups an important metric!
   - Describe breakdown of influenza deaths by age groups
   - The age groups 65+ is more than 2/3 of influenza deaths.
   - In some state this is different, but this is because of smaller populations in 65+ age group, maybe.
   - Clear conclusion: Age group 65+ is most vulnerable.

   Slide 3:

   - The influenza deaths data is now in a spatial analysis.
   - Describe the map features: colouring, circles, and colouring of circles.
   - Name a few states. Describe population characteristics.
   - Finish slide with clear conclusion: Age group 65+ is target.

   Slide 4:

   - Patient- Provider is number of influenza patients to providers.
   - Influenza patients counts patients reporting ILI
   - Colouring of map is different, but still, some of the same states.
   - Explain Wyoming as an example. Why is the state dark, but few deaths?

Slide 5:

- There are states which are focus, when creating allocation strategy
- This list of states is cross-referenced. States which have high influenza deaths and high patient-provider ratios
- Conclusions: Mention state names, Deployment in November
- Those who want more details on analysis please email me.

2. **Answers**

a) It would have been nice to have some data on the number of hospital and clinic staff per influenza patient. This would have allowed me to analyse better, where, and maybe even when there will be shortages of staff. Also, data on their absenteeism would have been great. Then maybe there would have been an analysis of this data too. After all, the objective is to place staff in those states which experience understaffing during the influenza season and supplement them. Also without data on how many staff we have as an agency it is impossible to assign specific numbers to each state.

b) In the data sets there were significant proportions of "suppressed" data or non-categorised (w.r.t age groups). This was the case for influenza patient visits, US Census, and Influenza Deaths. It is very possible that the overall results of the analysis would have been different if this data was available.

c) To effectively monitor the progress/results the recommended actions have, also gather new data, I would do the following:

- Collect survey data (quantitative & qualitative), from deployed staff on a bi-weekly or monthly basis on staffing levels, absenteeism, work-load.
- Collect survey data from the HR departments to which we deploy for absenteeism, staff on duty.
- Collect sentimental data from staff.

d) One could use a ratio of patients to nurses/ doctors as Key Performance Indicator