**Task 1: Building an Interactive Data Dashboard**

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D601: Data Storytelling for Varied Audiences Task 1

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1. **Create interactive Tableau dashboard to support executive decision-making. Your dashboard must be accessible to users with colorblindness**

Dashboard file: Task 1 Dashboard.twbx (included in the submission)

Tableau Dashboard URL: <https://public.tableau.com/app/profile/joseph.cayetano/viz/Task1Dashboard_17359420937690/Task1Dashboard>

A screenshot of a computer

Description automatically generated

The dashboard includes four different data representations (bar chart, line chart, pie chart, scatter plot), two different interactive controls (state filter & complication risk filter), and two different metrics (average total charges & average length of stay). The visualizations use colors from the Color Blind palette to make it accessible to users with colorblindness.

**A1. Write instructions to help users open the dashboard and use available filters**

I created my dashboard using Tableau Public. Tableau Public “is a free version of Tableau, a dashboard developing tool” (Puniskyte, 2024, par. 24). To open the dashboard, download the Task 1 Dashboard.twbx file from the submission page and open it with Tableau Public. Once opened, click the tab below titled “Task 1 Dashboard.” This is the dashboard for Task 1 part A. The dashboard can also be accessed by going to this link: https://public.tableau.com/app/profile/joseph.cayetano/viz/Task1Dashboard\_17359420937690/Task1Dashboard (in case the .twbx file doesn’t work). Make sure to view the dashboard in full screen to see everything on it. The dashboard includes four different data visualizations and two different metrics. The first visualization is titled “Readmission Rates (%) by Gender,” and it is a bar chart that shows the percentage of hospital readmissions for each gender. The second visualization is titled “Average Total Charges by Age Group and Gender,” and it is a line chart that shows the average total hospital charges by age group and gender. The third visualization is titled “Proportion of Patients for Each Service,” and it is a pie chart that shows the distribution of patients across different hospital services. The fourth visualization is titled “Relationship between Total Charges and Length of Stay by Complication risk,” and it is a scatterplot that shows the relationship between total hospital charges and length of stay, grouped by complication risk. These four data visualizations use colors from the Color Blind palette to make it accessible to users with colorblindness. As for the metrics, the first metric shows the average total hospital charges for all patients, while the second metric shows the average length of stay for all patients.

The dashboard also includes two interactive filters for users to explore the medical data. They are the state and complication risk filters. The state filter allows users to filter data based on a specific state. To use it, click the dropdown menu labeled “State” at the top-right corner of the dashboard and select a specific state to view data for that state only. Multiple states can also be selected. To reset the state filter, click the dropdown menu and select “(All).” The other filter is the complication risk filter, and it allows users to filter data based on complication risk levels (High, Medium, Low). To use it, head over to the complication risk checkbox menu at the top-right corner of the dashboard and select or unselect the boxes for High, Medium, or Low to show or hide those complication risk levels in the analysis. Multiple risk levels can also be selected. To reset the complication risk filter, select the box for “(All).” The visualizations and metrics get updated dynamically based on selected filters.

**References**

Puniskyte, A. (2024, February 2). *What is tableau public? your Data Visualization starting point*. Salesforce Ben. https://www.salesforceben.com/what-is-tableau-public-your-data-visualization-starting-point/