# PUBLIC HEALTHCARE AWARENESS CAMPAIGN

**Phase 1: Problem Definition and Design Thinking**

## Problem definition:

Public health awareness campaigns are designed to educate and motivate the public about important health issues. They can be used to raise awareness of new diseases, promote healthy behaviours, and reduce the risk of chronic diseases. Effective public health awareness campaigns are based on sound public health principles and use evidence-based strategies.This involves setting analysis objectives, gathering relevant data, creating informative visualisation using IBM Cognos, and extracting valuable insights from the data. Ultimately, the project seeks to provide a comprehensive understanding of the situation by examining statistical trends and patterns .

## Design Thinking:

Analysing a public health awareness campaign using big data involves leveraging large datasets to gain insights, evaluate the campaign's effectiveness, and make data-driven decisions. Here's an overview of how big data can be applied to analyse a public health awareness campaign:

Here is an overview on how we will be approaching this problem statement:

**1. Analysis Objectives:**
Increase awareness of [health issue] by [percentage] among the target audience.
Increase knowledge of [healthy behaviour] among the target audience by [percentage].

Improve attitudes towards [healthy behaviour] among the target audience by [percentage].
Increase the number of people who engage in [healthy behaviour] by [percentage].
Target Audience: [Describe the target audience, including demographics, geographic location, and any other relevant factors.]

**2. Data Collection:** Gather data related to the campaign, including:

- Demographic information of the target audience.
- Campaign reach (e.g., website traffic, social media engagement, event attendance).
- Health behaviour metrics (e.g., vaccination rates, smoking cessation, adoption of healthy habits).
- Survey responses and feedback from the audience.
- Data from wearable devices or health apps

*Dataset link:*
*https://www.kaggle.com/datasets/osmi/mental-health-in-tech-survey*

**3. Visualisation Strategy:**

We create relevant visualisations in IBM Cognos to represent your findings. We can use line charts, bar graphs, or other types of charts to display trends and comparisons effectively:
Time Series Plots: We create time series line plots for each country to visualise the daily cases and deaths over time.
Bar Charts: We generate bar charts to compare the mean values of daily cases and deaths for different countries.
Error Bars: We use error bar charts to visualise standard deviations, showing the variability around the mean for public health.

**4. Code Integration:**

**Create interactive experiences:** Code can be used to create interactive experiences that allow people to learn more about a health issue and take action. For example, a campaign could use a chatbot to answer people's questions about a particular disease or to help them find resources in their community.

**Personalise the message:** Code can be used to personalise the message of a campaign to make it more relevant and engaging for each individual. For example, a campaign could use code to track people's online activity and deliver targeted messages based on their interests.

**Measure the effectiveness of the campaign:** Code can be used to measure the effectiveness of a campaign by tracking metrics such as website traffic, social media engagement, and call volume. This information can be used to improve the campaign and make it more effective.