## Explain at least two scenarios that the model will resolve.

1. Healthcare Resource Allocation: Suppose for the application of planning healthcare resources where in there is a requirement to decide where to allocate resources like doctors, medications, and preventive measures. Our model helps by calculating numbers on average patient counts, disease categories, and pharmacy inventory data. We can identify a community with a high number of patients and a spike in a certain disease. It will also identify alarming conditions and inform us to send extra help and supplies to that community.
2. Environmental Impact on Health: Our model helps in identifying how the air quality affects community health. Our model helps by giving insights into data on air quality and fine particulate matter, linking them to health stats. If there is sudden spike in air pollution alongside more respiratory cases, It requires attention of health departments and its stakeholders. That insight could trigger actions like improving air quality or issuing health advisories to keep citizen safe. In addition, supplies like masks, asthma pump can be arranged to tackle the health impact.

## Explain at least two scenarios that the model will resolve from the deployed solution to excel and develop a pivot table solution.

1. Trend Analysis: With the help of trend analysis, we can spot patterns in health stats, pharmacy stock levels, and environmental factors. Seeing how these change over time helps in planning ahead and make smart decisions.
2. Comparative Analysis: Pivot table helps us in arranging the data as per requirement and give us overall analysis. We can compare health stats between different communities, check pharmacy inventory levels, and see how environmental factors stack up. This helps pinpoint areas needing more attention, revealing where resources are most needed and where they'll have the biggest impact.

## Explain how the forecast will enhance your solution and will address possible future scenarios.

1. Enhancing the Solution with Forecasting: Forecasting give us better insights into future values that a certain variable can have. In our solution, forecasting is predicting patient counts, air quality, which in turn can help health officials to arrange the resources.

## Explain at least two predictive scenarios.

1. Resource Planning: Our forecasting can predict future patient counts and disease trends. For instance, if the forecast shows a surge in lung disease cases in the upcoming season, health officials and pharmacy vendors can stock up on EpiPen, antihistamine, bronchodilators medications and schedule extra staff to handle the patients.
2. Environmental Management: Our predictions can help municipality and government pollution control department by giving insights into the data of air quality and its impact on health. Our forecasting can predict changes in air quality and fine particulate matter levels. If the forecast indicates a rise in pollution levels over the next few months, one can implement measures like stricter emissions regulations or public awareness campaigns to mitigate health risks.