PROBLEM STATEMENT

In the healthcare industry, efficient inventory management is critical for ensuring the availability of essential medical supplies while minimizing waste and costs. However, healthcare facilities often face challenges such as overstocking, stockouts, and expiration of perishable items, leading to suboptimal resource utilization and potential disruptions in patient care.

The objective of this project is to develop a predictive and prescriptive statistical model for inventory management in healthcare settings. The model aims to forecast future demand for medical supplies accurately and optimize inventory levels to meet demand while minimizing costs and mitigating risks associated with stockouts and excess inventory.

This project will navigate the complexities of data analytics and ethical data handling, offering a comprehensive solution to enhance operational efficiency, reduce costs, and mitigate risks associated with inventory management. The goal is to create a more equitable and data-informed inventory ecosystem, ultimately leading to improved quality of care and patient satisfaction.