ANALYTICS FOR HOSPITALS' HEALTH-CARE DATA

Recent Covid-19 Pandemic has raised alarms over one of the most overlooked areas to focus: Healthcare Management. While healthcare management has various use cases for using data science, patient length of stay is one critical parameter to observe and predict if one wants to improve the efficiency of the healthcare management in a hospital.

This parameter helps hospitals to identify patients of high LOS-risk (patients who will stay longer) at the time of admission. Once identified, patients with high LOS risk can have their treatment plan optimized to minimize LOS and lower the chance of staff/visitor infection. Also, prior knowledge of LOS can aid in logistics such as room and bed allocation planning.

Suppose you have been hired as Data Scientist of Health Man – a not for profit organization dedicated to manage the functioning of Hospitals in a professional and optimal manner.

Who does the problem affect?	It will affect the Hospital Management.
What are the boundaries of the problem?	Inadequate amount of beds, medicines, etc
What is the issue?	Due to increase in number of patients, the availability of doctors and beds are inadequate.
When does the issue occur?	It occurs when the more number of patients are admitted in the hospital.
Where does the issue occur?	The issue occurs in the Hospital.
Why is it important that we fix the problem?	In an emergency situation the patients may not have proper treatment and bed. So the analytics of existing patients data helps in providing proper treatment in correct time.

What solution to solve this issue?	Data Visualization is used to identify the Patients by visualizing the length of stay in the hospital.
What methodology used to solve the issue?	Data Analytics techniques are used to identify the patients and suggest the precautions that can be taken for managing the prerequisite of patients.