Analytics for Hospital Health Care Data

Problem Statement:

In Kumaran Hospital Coimbatore there are lots of patients admitted and as well as discharged day by day. When this hospital hit the period of pandemic there was a sudden hike in allocation of beds and oxygen cylinders which they some how managed. This hike in allocation should be predicted before so that an analysis will be made in order to manage the hospital resources and also to predict how patients who are already admitted in the hospital is going to stay in the hospital.

Who does the problem affect?	Hospital management and pharmaceutical inventory manager
What are the boundaries of the problem?	People who are treated late without bed facility are struggling the most.
What is the real issue?	In medical field treating patients as soon as they get admitted in the hospital has more chances to survive when there is a serious illness with the person, when there is a sudden rush in patient admission there is no enough bed facility which leads to lack of hospital resources. When there is a LOS-risk(patient who stay longer) they should be handled in a sperate way so they it

	is made sure they wont get affected even more.
When does the issue occur?	Occurs when there is a sudden outbreak of a new pandemic. Lack of hospital resources where there is fault in advance prediction by the person in charge.
Where does the issue occur?	The issue occurs in hospitals and health care facilities.
Why it is crucial to solve this problem as soon as possible?	It requires an advance level of prediction of how long a person will stay so that the upcoming patients will be handled with proper care.
What solution to solve this issue?	An advance data analytics prediction model is introduced so that there will be resource allocation as well as smooth functioning of the hospital management.
What methodology can be used to solve this problem?	We can use a regression algorithm with the help of random forest which consist of various decision tree to analyze and predict the accurate outcome.