

IDEATION PHASE

PROBLEM STATEMENT

Date	20.9.2022
Team ID	PNT2022TMID11392
Project Name	Analytics for Hospital's Healthcare Data

Problem Statement:

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.

The goal is to accurately predict the Length of Stay for each patient on case by case basis so that the Hospitals can use this information for optimal resource allocation and better functioning. The length of stay is divided into 11 different classes ranging from 0-10 days to more than 100 days

I am	I'm trying to	But	Because	Which makes me feel
Hospital Management	Assured treatment in any kind of situation and ensuring the spatial facility for patients	Proper allocation of resources become tough challenge in hospital	The number of affected people becomes high and couldn't predict the arriving cases and to allocate the resources and admission	<ul style="list-style-type: none"> • Loss of Confidence • Helpless • Tensed
Hospital Staff	Personal care on admitted patients and to monitor the health condition of patients	It is not possible all time	The flue and virus may affect the health of monitoring staffs	<ul style="list-style-type: none"> • Tensed • Over consciousness
Patient	Get good treatment and get cure from COVID-19	Difficult to reach the hospitals	Lack of treatment facilities and space due to stay of other COVID patients.	<ul style="list-style-type: none"> • Frustration • Being helpless • Tensed