## Analytics For Hospitals' Health-Care Data Ideation

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## **TOP THREE PRIORITIZED IDEAS:**

- 1. The length of stay (LOS) is an important indicator of the efficiency of hospital management. Reduction in the number of inpatient per day results in decreased risk of infection and medication side effects, etc., (improvement in the quality of treatment, and increased hospital profit with more efficient bed management). The length of Stay(LOS) of the patients can be predicted using different machine learning algorithms with respect to the factors that related to the length of stay such as age, history of previous admissions, patient condition during discharge, type of treatment etc.,
- 2. The important datas based on this factors are first preprocessed, and after exploration by using various techniques of supervised machine learning algorithms that include decision tree prediction model, regression etc., LOS prediction using unstructured data had similar accuracy to using structured data and can be considered of use to accurately model LOS.
- 3. The length of stay of patients can be displayed using IBM cognos Analytics. The LOS prediction provides better services, managing hospital resources and controls their costs. Predictive analytics is an increasingly important tool in the healthcare field since modern machine learning (ML) methods can use large amount of available data.