LITERATURE SURVEY

Date	19.9.2022
Project Name	Analytics for Hospital's Healthcare Data
Team ID	PNT2022TMID11392

Title and Author	Year	Techniques	Findings	Pros	Cons
Data and Network Analytics for COVID-19 Patients – **Sergio Martinez, Antonio G marques, Cristina Soguero-Rui**	2021	Data Modelling, Confidence interval with Bootstrap, Graph Modelling, Building graphs from MTS	It has explored the potential of data network. Analysing the HER and to gain knowledge about the COVID-19 patients.	The new way to understand and model the information handled. Analysing the pairwise correlation without making any assessment.	The no.of patients is not large and they were treated in same hospital so that over fitting may exit and caution when generalizing the conclusion.
Prediction of COVID-19 Hospital Length of Stay and Risk of Death using AI Based Modelling – **Bassam Mahboub, Hussam Alshrideh, Laila Salameh**	2021	Predictive Analysis, Artificial Intelligence, DT Algorithm	In this study, multivariate analysis to identify the key variables using the DT algorithm	DT model shows an intriguing role for dexamethasone in saving lives, ranging from zero risk of death.	The DT model was further validated by unsupervised learning methods showing similar separation pattern, and ROC suggest a stable and robust DT Model.

Big Data Analytics in Healthcare – **Kornelia Batko, Andrzej Slezak**	2022	Big Data Analytics and Data-driven method	Medical facilities are working on both structured and unstructured which comes from database. It clearly shown that the decision made are largely data driven.	It increased the analytics of diagnosis, preventing the public health issues since the accurate prediction is involved.	It is necessary to examine use of structured and unstructured data in vast area of medical field
Hospital Length of Stay for COVID-19 patients: Data Driven method for forward planning – **Bindu vekaria, Christopher Overton, Arkadiusz wisniowski, Neil A Hanley and Mark J Elliot.**	2021	Survival Analysis, MFT data preparation, AFT Model,	AFT survival model and Truncation Corrected method both will underlying Weibull distribution, were fitted to the data to estimate LOS from hospital.	Three different estimations of LOS of patients is used.	Missingness of large dataset which may lead in bias of estimation. Delay in update and delay in reporting.