Virtual Nursing Discharge: Enhancing Health and Well-Being while Reducing Readmissions

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ABSTRACT:

Background: Virtual nursing has emerged as a viable solution to improve patient health outcomes and reduce hospital readmission. In this study, our method of approach was to investigate the advantages and disadvantages of virtual nursing discharge for improving health and well-being. Our sources utilized in this research were observation of the care team and interviews with patients who had undergone virtual nursing discharge. Implementing the use of virtual nursing can alleviate workload that can be done remotely and allow nurses to focus on more direct, quality patient care. This paper provides an overview of the role of virtual nursing in the discharge process, including its benefits, challenges, and best practices. It will also identify the challenges and limitations concerned around patient privacy and the need for extended preparation and communication.

Objective: The objective of this study was to determine whether the integration of a virtual discharge nurse would have a positive effect on the patient's discharge experience, efficiency, and process.

Methods: We analyzed data from 2387 virtual nurse discharge summaries from Wellstar Pauling Hospital that occurred between October 2022 to February 2023. With the data provided, we utilized machine learning to predict the number of discharges that will occur within the two weeks. This prediction model aims to help determine the number of virtual nurses who will need to be scheduled on specific days. A Failure Model and Effects Analysis (FEMA) was also conducted to identify any potential gaps that may be inhibiting the efficiency of the virtual nursing discharge process.

Results: We conducted a statistical analysis to try to understand the virtual nursing discharge process. We identified that patients were mostly discharged from the hospital during weekdays. On average Wednesday experienced the highest number of discharges with 23.67, while Sunday only had 7 discharges in comparison. On average the pre-discharge duration was approximately five minutes accounting for the majority of time used during discharge. Overall, the average number of nurses that are responsible for discharge for a given day is 1.47 with a standard deviation of .685 and the average number of discharges that occur on a given day was 20.07 with a standard deviation of 7.76.

Conclusion: Virtual nursing during patient discharge has the potential to significantly enhance health outcomes and well-being while reducing hospital readmissions. Virtual nursing provides patients with personalized care, education, and support prior to leaving the hospital. This enables patients to take an active role in their recovery and better manage their conditions. Virtual nursing is a promising approach that can benefit both patients and healthcare systems. By embracing this technology, healthcare providers can enhance the quality of care they provide while reducing hospital readmissions and improving patient outcomes and well-being.