



Scienxt Journal of Nursing Studies Volume-1|| Issue-2|| Year-2023|| July-Dec|| pp.1-18

Neo-Bedside Monitoring Device

Dr. Amin Mohammad

Assistant Professor, Department of Nursing, Aligarh Muslim University, Aligarh, Uttar Pradesh, India

*Corresponding Author: Dr. Amin Mohammad E-mail: amin.md@gmail.com

Abstract:

We depict the improvement of Neo, a minimal expense bedside gadget that can get basic information continuously by connecting with a few gadgets joined to children in NICUs. Premature infants in NICUs have many linked monitoring equipment, which collect several terabytes of data daily. Every hour, a record is made by hand of the constant essential data from these devices. This results in inaccurate results and the loss of precious detail. Clinicians additionally have a hard time visualising and detecting patterns of diagnostic value due to the inconsistent reporting of physiological data. The continuous information gathered by Neo is shipped off a cloud-based large information stage called iNICU [29,30], which is itself developed on an inexpensive IoT platform. In addition to reducing the likelihood of human mistake during documentation, the gadget also permits data capture at near-real-time rates, which may be used to show where each patient stands right now in the Neonatal Intensive Care Unit. Neo automatically graphs or charts the current state of vital signs and historical patterns, so doctors and nurses may check in from anywhere in the world. Diseases including sepsis, respiratory distress syndrome (RDS), necrotizing enterocolitis (NEC), and retinopathy of prematurity (ROP) are scored using Neo's physiological signal and clinical criteria. This score aids doctors in making decisions that promote prompt intervention and predicts the newborn's physiological health. INDEX TERMS Neonatal Intensive Care Units, Internet of Things, Aggregators of Cloud-based Device Data, Early Warning Scores, and Big Data.

Keywords:

Respiratory Distress Syndrome, Necrotizing Enterocolitis, Retinopathy of Prematurity, Neonatal Emergency unit, Neo Device