

SAANS: A neonatal continuous positive airway pressure (CPAP) Support system

Biotechnology Industry Research Assistance Council (BIRAC), Govt. of India supported start-up Coeo Labs, a division of InnAccel Technologies Pvt Ltd has come up with innovation called Saans - the first infrastructure-independent, portable, neonatal continuous positive airway pressure (CPAP) support system.



It is a portable easy to use, robust, neonatal CPAP device that can work with or without electricity, as it has an inbuilt battery backup that provides breathing support for infants suffering from Respiratory Distress Syndrome (RDS) in both hospital and transport settings.

It is one of the first CPAP devices to have a manual powering option and is designed to work during transport, as well as secondary care settings. SAANS offers breathing support to neonates before and during transport to a NICU for longer term care and helps to address a lot of RDS related deaths each year in India. Current CPAP designed devices are designed for the NICU but are very expensive, require skilled manpower and good infrastructure are not available for transport or secondary care settings. As compared to current CPAP devices, Saans can be used during transportation or in low-resource settings (PHC, CHC and maternity homes).

The foundation of this product is simple, it provides quality, low-cost breathing support system that does not have any dependency on physical infrastructure and is applicable for use across the globe. SAANS can be used in various settings and clinical applications, making it the best solution for Indian healthcare. This affordable healthcare solution has potential of huge impact and mass outreach.

India has one of the highest rates of RDS, which requires immediate breathing supports. RDS is a breathing disorder in premature babies caused by the improper development of the lungs, and it remains a significant cause of neonatal mortality. It is estimated that one-third of these deaths occur while being transported to a neonatal intensive care unit (NICU) because of the lack of breathing support.

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