

NOX-T3

CareFusion NOX-T3 Portable Sleep Monitor

Jeffory Wyscarver
Marketing Manager
CareFusion
Yorba Linda, CA



Engineers at Nox Medical, in cooperation with CareFusion, started with the proverbial clean slate.

Years at the drawing board have paid off with the development of the NOX-T3 Portable Sleep Monitor. The device is compact, lightweight and easy to use—designed for both adult and pediatric patients.

Using the body area network (BAN) monitoring approach, the NOX-T3 features an array of wireless sensors, based on a Bluetooth® receiver. Bluetooth is similar to a USB, in that one port can accommodate multiple sensors. The NOX-T3 already has the ability to pair with a Bluetooth oximeter and a CO₂ monitor, with plans to work with an auto-titrating PAP unit. When you couple the advanced technology with the ease of use, we can improve the diagnostic bandwidth and make progress treating more apnea patients.

JOURNEY TO EXCELLENCE

After spinning off from Cardinal Health's Clinical and Medical Products business in September 2009, CareFusion continues to build momentum. Thanks to a strategic partnership with Nox Medical, the mission to diagnose undiagnosed sleep apnea patients is becoming a reality. The challenge now is attracting the reluctant and less obvious apnea patient who wants little or no part of in-lab, full polysomnography studies. Home sleep testing will fill those gaps without threatening the financial livelihood of sleep laboratories by attracting patients who would otherwise not elect to be tested.

GROWING A SLEEP LAB'S BUSINESS

Can home testing actually grow the sleep lab business? Home testing, which is what the sleep labs are most afraid of, is something that is going to benefit them. When the message gets out that the sleep test can be done in the home, more people who suffer from mild and moderate sleep disorders are going to pick up the phone and inquire about getting help with their sleep problem. We are convinced that home sleep testing will grow the entire sleep diagnostic market including the in-lab hospital market.

CARDIOLOGISTS: A GROWING MARKET FOR SLEEP DIAGNOSTICS

CareFusion will sell the majority of NOX-T3s to cardiologists, a crucial and growing market. These clinicians appreciate the ease of use and the cost. Wyscarver reports the University of Alberta recently began an extensive longitudinal pediatric study

going to use the NOX-T3 as part of their data collection system.

According to the principle investigator, "Edmonton is one of four Canadian cities (Edmonton, Toronto, Winnipeg and Vancouver) participating in a new national study of 5000 families that is exploring the connection between the environment and child health. In Edmonton, we will also explore the relationship between the environment, sleep, and childhood growth and development. The CHILD study needs 1000 pregnant women in Edmonton.

Information is collected using a combination of home and clinic visits and by questionnaires completed at certain times during the baby's life, from the second half of pregnancy up until the baby is 5 years old. The CHILD team of investigators, over 40 leading scientists from across Canada, have developed a study plan of visits that includes questionnaires, breathing and allergy tests, and measurements of cord blood, urine, and breast milk in order to collect information that reflects the family's lifestyle, the stress they may experience, the food they eat, any health issues that affect the family and things in the child's environment that the family may be knowingly or unknowingly exposed to."

NOX-T3 PORTABLE SLEEP MONITOR AT A GLANCE

- Wireless Bluetooth® Oximeter
- Miniaturized technology: 88gram/79x63x21mm (with battery)
- Thorax & Abdomen RIP Effort + RIP Flow – RIP phase for paradoxical breathing
- Integrated snore microphone with true audio signal
- Gold Standard PSG Signals
- Check waveforms real time
- No accessible connectors/child safety battery door
- Full featured type 3 device/Type 4 size and complexity
- Redundant Flow signal through RIP Effort and/or nasal cannula
- Wireless signals: SpO₂, Pulse, Snore, and Body Position
- Standard disposable or rechargeable batteries (AA)
- Intuitive analysis and reporting software
- Extended applicability: pediatric, cardiologist, dental and ENT patients
- Extensive review possibilities
- Pulse Transit Time and Heart rate Variability
- Multi-night recordings

For more information about the NOX-T3, go to www.carefusion.com/t3