# Medtronic

How to prepare your hospital against Bronchiolitis



Presenting Nellcor<sup>™</sup> Oxysoft<sup>™</sup> SpO<sub>2</sub>, a sensor designed for infants.

Pulse oximetry is commonly used to assess:

- Bronchiolitis severity grade<sup>1</sup>
- Patient admission & discharge criteria<sup>1</sup>
- Supplemental O<sub>2</sub> therapy<sup>1</sup>

First SpO<sub>2</sub> sensor with a gentle silicone adhesive<sup>2</sup>

Brighter LEDs and lower profile optical components<sup>3</sup>



50%

faster time\* to post in challenging conditions: low perfusion and thick tissue<sup>3</sup> 70%

improvement\* in blocking bright ambient lights that can cause drops out<sup>3</sup> Removes

87%

less protein\* - so you can pull it without pulling fragile skin4  $2\times$ 

thinner optics profile\*<sup>3</sup> Withstands

18

repositions without losing adhesiveness<sup>5</sup>





# SatSeconds<sup>†</sup> offering the solution to alarm fatigue.

Alarm fatigue is a growing problem in healthcare, with studies showing that healthcare professionals are becoming desensitized to alarms due to the sheer number of false alarms they are receiving.<sup>6</sup>

SatSeconds<sup>†</sup> feature filters out the very short dips in  $SpO_2$  which may help **reduce nuisance alarms** by up to **40%** in neonates and **minimize alarm fatigue**<sup>7,8</sup>. If  $SpO_2$  drops below the alarm threshold for a longer period, the alarm will sound and you know the alarm is significant.

## Monitor with confidence

The Nellcor™ bedside SpO₂ patient monitoring system§ incorporates the latest Nellcor™ digital signal processing technology for accurate, reliable readings even during low perfusion and other forms of signal interference³, providing clinicians with access to the most critical information regarding their patients′ respiratory status.

- 96-hour trend memory with data captured every four seconds.
- Battery operating time >5 hours.

# The ventilation support your neonate patients need.

Upgrade your Puritan Bennett™ 980 ventilators with software to help enhance neonatal lung protection.

### Enhance patient care and comfort.

#### The high flow oxygen therapy (HFO<sub>2</sub>T) software

enhances comfort for patients. This therapy delivers oxygen at higher flow rates than traditional oxygen therapy to help improve oxygenation. 11,12 This option is available for neonatal and paediatric patients with flow rates up to 50 L/min.

## Provide safe ventilatory support.

#### The Puritan Bennett™ NeoMode 2.0 software

option was developed for neonates to address the issues most critical to their care and safety, such as accurate breath delivery, responsive triggering, lower elevated oxygen preset for procedures, effective alarm management, and automatic leak compensation.<sup>13</sup>

## Monitor every breath.

#### NIV+ software<sup>‡</sup> for the Puritan Bennett<sup>™</sup> 980 ventilator

measures end inspiratory interface pressure and interface PEEP pressure to help reduce the uncertainty around pressure delivery to the patient.<sup>13</sup> It also provides a more robust means of determining circuit disconnect, especially when leaks are present.<sup>14</sup>





- \* Compared to Nellcor MaxN sensor
- † A third party study showed that at a setting of 50, nuisance alarms were reduced in the neonate population by 40%. Clinical judgment should be used to determine appropriate SatSeconds settings
- § The Nellcor Patient Monitoring system should not be used as the sole basis for diagnosis or therapy and is intended only as an adjunct in patient assessment.
- ‡ The NIV+ software option works in conjunction with the NeoMode 2.0 software option.
- Mahant S, Wahi G, Bayliss A, et al. Intermittent vs Continuous Pulse Oximetry in Hospitalized Infants With Stabilized Bronchiolitis: A Randomized Clinical Trial. JAMA Pediatr. 2021;175(5):466-474. doi:10.1001/jamapediatrics.2020.6141
- 2. Oxysoft Patent application AD No. A0003070US01
- 3. During internal head-to-head bench test compared to MaxN with validated test equipment Expanded Claims report RE00368468A00 RevA
- Based on validation data in head-to-head clinical testing compared to MaxN CSR 2021 Gentleness 0312v1 S20-12-RE00357465 RevA
- $5. \quad \text{Based on validation data in head-to-head clinical testing compared to MaxN-CSR Reapplication 2021 0312v1 S20-14}.$
- 6. ECRI Institute. 2015 Top 10 Patient Safety Concerns for Healthcare Organizations, April 2015.
- 7. Brostowicz, Heather M. and Rais-Bahrami, K. 'Oxygen Saturation Monitoring in the Neonatal Intensive Care Unit (NICU): Evaluation of a New Alarm Management'. 1 Jan. 2010: 135 139.
- 8. Stefanescu BM, O'Shea TM, Haury F, Carlo WA, Slaughter JC. Improved Filtering of Pulse Oximeter Monitoring Alarms in the Neonatal ICU: Bedside Significance. Respir Care. 2016;61(1):85-89. doi:10.4187/respcare.04177
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- 10. The Joint Commission. Medical device alarm safety in hospitals. Sentinel Event Alert. April 8, 2013; issue 50. Available at: http://www.jointcommission.org/assets/1/18/SEA\_50\_alarms\_4\_5\_13\_FINAL1.PDF
- Biselli PJ, Kirkness JP, Grote L, et al. Nasal high-flow therapy reduces work of breathing compared with oxygen during sleep in COPD and smoking controls: a prospective observational study. J Appl Physiol (1985). 2017;122(1):82-88.
- 12. PuritanBennet980 Operators Manual N° PT00128079A00/2020
- 13. PuritanBennet980 NIV+ Software Option Operator's Manual N° PT00105008/2020
- Itagaki T, Chenelle CT, Bennett DJ, Fisher DF, Kacmarek RM. Effects of Leak Compensation on Patient-Ventilator Synchrony During Premature/Neonatal Invasive and Noninvasive Ventilation: A Lung Model Study. Respir Care. 2017;62(1):22-33.

# **Medtronic**

Important: Please refer to the package insert for complete instructions, contraindications, warnings and precautions.

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