

Masimo SET®: Clinically Proven



Over 100 independent and objective studies have shown that Masimo SET® outperforms other pulse oximetry technologies.¹

> On a post-surgical unit it was found that:

- Rescue calls and ICU transfers were **reduced by 65% and 48%**, respectively, after the implementation of continuous surveillance monitoring with Masimo SET®.²
- Over five years, clinicians achieved their goal of **zero preventable deaths** or brain damage due to opioids.³
- Over ten years, clinicians maintained a **50% reduction** in unplanned transfers and a **60% reduction** in rescue events, despite increases in patient acuity and occupancy.⁴

“I saw and was conquered. I was not able to defeat the Masimo SET® pulse oximeter using all the motion and low pulse tricks I know. This technology is most impressive and should be available in all oximeters.”

John Severinghaus, M.D.

*Professor of Anesthesiology, Emeritus
University of California, San Francisco*

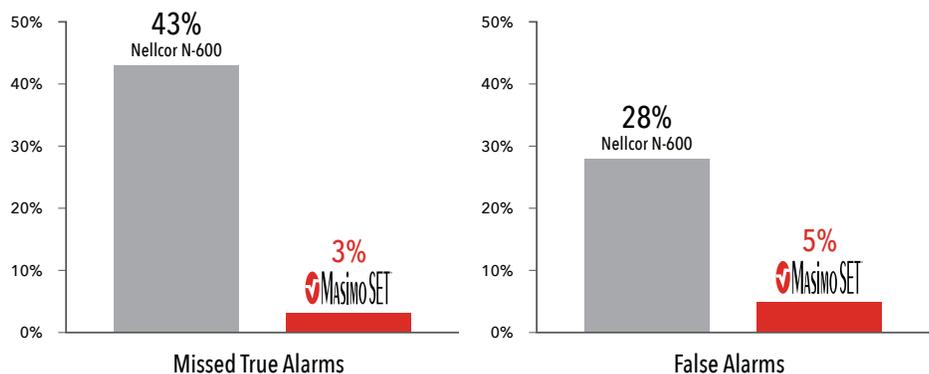
Masimo continues to innovate and in 2019 introduced improved SpO₂ accuracy with RD SET® sensors of 1.5% A_{RMS}* to provide clinicians with greater confidence when monitoring oxygen status during motion and no-motion conditions. Previous studies utilized sensors with SpO₂ accuracy of 3% A_{RMS} during motion.

* A_{RMS} accuracy is a statistical calculation of the difference between device measurements and reference measurements. Approximately two-thirds of the device measurements fell within ± A_{RMS} of the reference measurements in a controlled study.

Performance During Motion and Low Perfusion

> Masimo SET® had 3% missed true alarms and 5% false alarms versus 43% and 28%, respectively, when using competitor technology.

Performance During Motion and Low Perfusion



Shah et al. *J Clin Anesth.* 2012;24(5):385-91.

Results shown are calculated by combining sensitivity and specificity outcomes of machine-generated and volunteer-generated motion.

The Performance of Masimo SET®



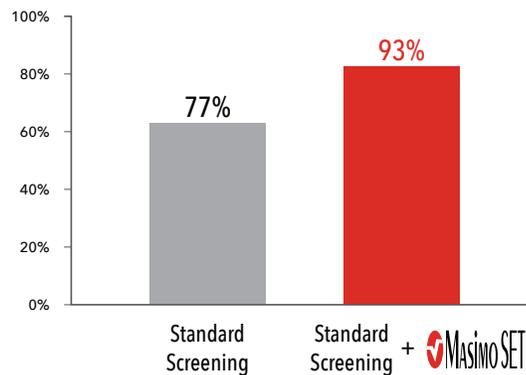
- > In a PACU, Masimo SET® had a greater than **50% reduction** in false alarms compared to other pulse oximetry technology.⁵
- > In a study of 122,738 infants, critical congenital heart disease (CCHD) screening sensitivity increased from **77% to 93%** with the combined use of Masimo SET® and clinical assessment.⁶
- > In a study of 39,821 infants, CCHD screening sensitivity increased from **63%** with physical exam alone to **83%** with physical exam and Masimo SET® pulse oximetry.⁷
- > In two NICU settings, Masimo SET®, coupled with changes in clinical practice, showed significantly **reduced rates of severe retinopathy of prematurity (ROP)** and decreased the need for laser treatment.^{8,9}
- > Researchers showed time to **reliable oxygen saturation readings during neonatal resuscitation** was approximately **50 seconds faster** using Masimo SET® than using other pulse oximetry technologies.¹⁰

CCHD Screening

- > When combined with clinical assessment, Masimo SET® **improved** critical congenital heart disease (CCHD) screening sensitivity to 93%.

Zhao et al. *Lancet*. 2014 Aug 30;384(9945):747-54.

Improved Critical Congenital Heart Disease Screening Sensitivity vs. Clinical Assessment Alone

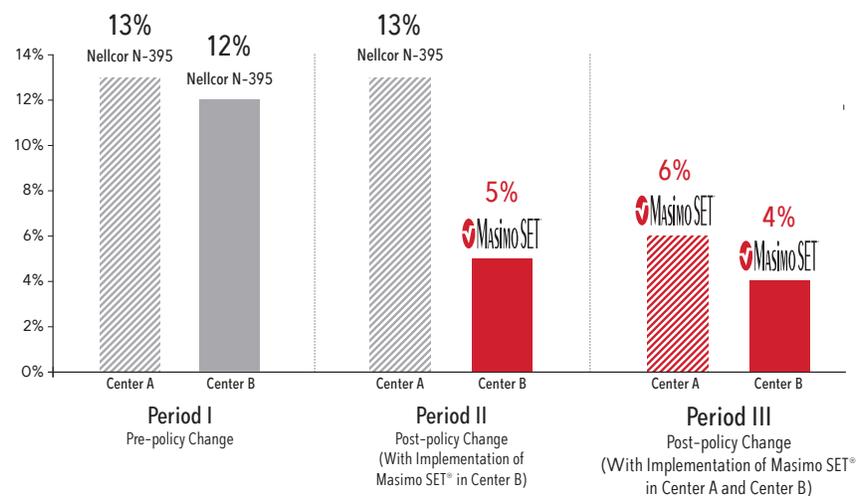


Retinopathy of Prematurity

- > Masimo SET®, coupled with changes in clinical practice, led to a significant **reduction** in rates of severe retinopathy of prematurity (ROP).

Castillo et al. *Acta Paediatr*. 2011 Feb;100(2):188-92.

Severe Retinopathy of Prematurity Rate



¹ Published clinical studies on pulse oximetry and the benefits of Masimo SET® can be found on our website at <http://www.masimo.com>. Comparative studies include independent and objective studies which are comprised of abstracts presented at scientific meetings and peer-reviewed journal articles. ² Taenzer AH et al. Impact of pulse oximetry surveillance on rescue events and intensive care unit transfers: a before-and-after concurrence study. *Anesthesiology* 2010;112(2):282-287. ³ Taenzer A et al. Postoperative Monitoring – The Dartmouth Experience. *Anesthesia Patient Safety Foundation Newsletter*. Spring-Summer 2012. ⁴ McGrath S et al. Surveillance Monitoring Management for General Care Units: Strategy, Design, and Implementation. *The Joint Commission Journal on Quality and Patient Safety*. 2016 Jul;42(7):293-302. ⁵ Malviya S et al. False Alarms and Sensitivity of Conventional Pulse Oximetry Versus the Masimo SET® Technology in the Pediatric Postanesthesia Care Unit. *Anesth Analg* 2000; 90(6):1336-1340. ⁶ Zhao et al. Pulse oximetry with clinical assessment to screen for congenital heart disease in neonates in China: a prospective study. *Lancet* 2014 Aug 30;384(9945):747-54. ⁷ de-Wahl Granelli A et al. Impact of pulse oximetry screening on the detection of duct dependent congenital heart disease: a Swedish prospective screening study in 39,821 newborns. *BMJ* 2009;338:a3037. ⁸ Castillo et al. Prevention of retinopathy of prematurity in preterm infants through changes in clinical practice and SpO₂ Technology. *Acta Paediatr*. 2011 Feb;100(2):188-92. ⁹ Sola et al. Can changes in clinical practice decrease the incidence of severe retinopathy of prematurity in very low birth weight infants? *Pediatrics* 2003;111(2):339-345. ¹⁰ Baquero H et al. Avoiding Hyperoxemia during Neonatal Resuscitation: Time to Response of Different SpO₂ Monitors. *Acta Paediatr*. 2011 Apr;100(4):515-8.

Caution: Federal (USA) law restricts this device to sale by or on the order of a physician. See instructions for use for full prescribing information, including indications, contraindications, warnings, and precautions.