

# Masimo SET<sup>®</sup> and PVi<sup>®</sup>

## Reduce Costs and Improve the Process of Care



**“Implementation of surveillance with pulse oximetry was associated with a reduced need for patient rescue and intensive care unit transfer.”<sup>4</sup>**

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**Studies have shown efficiency gains following the implementation of Masimo SET<sup>®</sup> pulse oximetry and PVi (Pleth Variability Index) in a variety of clinical settings**

### With Masimo SET<sup>®</sup> Pulse Oximetry

Includes reductions in sensor usage, arterial blood gas testing, oxygen requirements, and false alarms

34% Reduction in arterial blood draws in critically ill patients<sup>1</sup>

40% Reduction in oxygen requirements in the ICU setting<sup>2</sup>

93% Reduction in false alarms with higher specificity<sup>3</sup>

### With Masimo Patient SafetyNet<sup>™</sup>\* Continuous Monitoring System

Based on a 36-Bed Orthopaedic Unit

65% Reduction in rapid-response rescues with implementation of patient surveillance monitoring system<sup>4,5</sup>

48% Reduction in ICU transfers following piloting of Patient SafetyNet in the general ward<sup>4,5</sup>

### With Masimo PVi

Based on 198 surgical patients

32% Reduction in patient length of stay (from 6.8 days to 4.6 days) when using PVi as part of an enhanced recovery after surgery (ERAS) protocol<sup>6</sup>

<sup>1</sup> Durbin C.G. Jr., Rostow S.K. More Reliable Oximetry Reduces the Frequency of Arterial Blood Gas Analyses and Hastens Oxygen Weaning after Cardiac Surgery: A Prospective, Randomized Trial of the Clinical Impact of a New Technology. *Crit Care Med.* 2002 Aug;30(8):1735-40. <sup>2</sup> Patel D.S., Rezkalla R. Weaning protocol possible with pulse oximetry technology. *Advance for Resp Care Managers.* 2000; 9(9):86. <sup>3</sup> Shah N., Ragaswamy H.B., Govindugari K., Estanol L. Performance of Three New-Generation Pulse Oximeters During Motion and Low Perfusion in Volunteers. *J Clin Anesth.* 2012;24(5):385-91. <sup>4</sup> Taenzer A.H., Pyke J.B., McGrath S.P., Blike G.T. 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. <sup>5</sup> Taenzer A.H., Blike G.T. *APSF Newsletter* 2012. Available at: [http://www.apsf.org/newsletters/html/2012/spring/01\\_postop.htm](http://www.apsf.org/newsletters/html/2012/spring/01_postop.htm). Accessed June 14, 2012. <sup>6</sup> Thiele RH et al. Standardization of Care: Impact of Enhanced Recovery Protocol on Length of Stay, Complications, and Direct Costs After Colorectal Surgery. *J Am Coll Surg.* 2015 Apr;20(4):430-443. <sup>7</sup> Dasta J.F., et al. Daily cost of an intensive care unit day: the contribution of mechanical ventilation. *Crit Care Med.* 2005 Jun;33(6):1266-71. <sup>8</sup> Wunsch H, et al. ICU Occupancy and mechanical ventilator use in the United States. *Crit Care Med.* 2013 Dec;41(12):2712-9. \* The use of the trademark Patient SafetyNet is under license from University Health System Consortium.



# Potential for Reduced Costs with Implementation of Masimo Solutions

Potential Annual Cost Savings with Masimo SET® Pulse Oximetry, Patient SafetyNet, and PVi*	
Reduction in arterial blood gas testing <sup>1</sup> (Masimo SET® compared to conventional pulse oximetry)	\$77,520 <sup>†</sup> (€64,241)
Reduction in ventilator time <sup>2,7,8</sup> (Masimo SET® compared to conventional pulse oximetry)	\$266,450 <sup>†</sup> (€220,807)
False alarm distraction productivity savings <sup>3</sup> (Masimo SET® compared to conventional pulse oximetry)	\$180,180 <sup>†</sup> (€149,315)
Reductions in ICU transfers in 36-bed step-down unit due to continuous surveillance monitoring with Patient SafetyNet, including SET® pulse oximetry <sup>4,5</sup>	\$1,479,012 (€1,225,657)
Reduction in length of stay due to using PVi in an enhanced recovery after surgery (ERAS) protocol <sup>6</sup>	\$777,061 (€643,950)
<b>Total Potential Annual Cost Savings</b>	<b>\$2,780,223 (€2,303,971)</b>

**Masimo SET® + Patient SafetyNet + PVi:  
More than \$2.5 Million (€2.1 Million) in Potential Annual Cost Savings\***

<sup>†</sup>Estimates based on a 250-bed hospital model

\*Results may vary.

For professional use. See instructions for use for full prescribing information, including indications, contraindications, warnings, and precautions.

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