

## Saving Lives Through Continuous Post-Operative Monitoring

"Failure to Rescue" is when a patient dies from a medical complication that was not recognized in a timely manner or treated appropriately; these deaths are preventable, costly, and all too common.

- The Joint Commission reports that from 2004-2011, **one in three** opioid-related adverse drug events—including deaths—was related to **improper monitoring** of the patient.<sup>1</sup>
- Failure to Rescue from post-operative opioid events can be prevented through **continuous monitoring using pulse oximetry** to measure blood oxygenation and respiration rate.<sup>2</sup>
- There is currently no law requiring continuous monitoring of post-operative patients on opioids, **enacting legislation would save the Medicare Program \$1 Billion annually.**<sup>3</sup>

Pulse oximetry is routinely **used in nearly every hospital in the US** even in rural and outlying areas; the technology is there, we just need to use it.

### Continuous Monitoring is Proven to Save Lives and Money

A study performed at the Dartmouth-Hitchcock Medical Center showed that clinicians using pulse oximetry and remote monitoring technologies to continuously monitor post-operative patients were able to identify signs of clinical distress earlier and improve outcomes.<sup>4,5</sup>

- Monitoring reduced the number of Intensive Care Unit (ICU) interventions by 65% and days in the ICU by 135 per year.

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<sup>1</sup> The Joint Commission Sentinel Event Alert. Safe use of opioids in hospitals. 2012;49(8):1-5.

<sup>2</sup> Weinger MB and Lee, LA. "No Patient Shall Be Harmed By Opioid-Induced Respiratory Depression." *The Official Journal of the Anesthesia Patient Safety Foundation*. Fall 2011.

<sup>3</sup> Reed K and May R. HealthGrades Patient Safety in American Hospitals Study. March 2011.

<sup>4</sup> Taenzer AH, Byke JB, McGrath SP and GT Blike. 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 AH and Blike GT. Postoperative Monitoring – The Dartmouth Experience. *The Official Journal of the Anesthesia Patient Safety Foundation*. Spring-Summer 2012.

- The study showed savings of nearly **\$60,000 per patient** equaling almost **\$1.5 million in annual savings** for that **single hospital**.
- Since implementing continuous monitoring in the hospital in 2007, **no patients have died** or had serious brain injuries as a result of respiratory depression from opioids.

### Support for Continuous Monitoring

- The **Institute of Medicine** described failure to rescue as a critical issue in healthcare quality.<sup>6</sup>
- The **Joint Commission** has issued a Sentinel Event Alert, urging all hospitals to use continuous electronic monitoring for patients receiving post-operative opioids.
- The **Anesthesia Patient Safety Foundation** recommends that all patients receiving parenteral opioids be continuously monitored.

### Solve This Problem

**Enact legislation that requires continuous monitoring** using FDA approved pulse oximetry for adequacy of ventilation of all post-operative patients on opioids to reduce failure to rescue and save lives.

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<sup>6</sup> Committee on Quality of Health Care in America, Institute of Medicine, ed. Crossing the Quality Chasm: A New Health System for the 21st Century. Washington, DC, National Academy Press, 2001.