Virtually every patient-connected device uses audible alarms to notify caregivers of a change in patient condition or in device status. However, numerous alarms that are not clinically significant are a distraction to busy caregivers. Reducing distractions from clinically insignificant alarms helps preserve caregiver alarm vigilance, leading to improved patient safety.1,2

Smart Capnography™ is a family of algorithms designed to simplify the use of CO₂ monitoring on Microstream®-enabled patient monitors to improve patient safety and clinical workflow.3,4

Smart Alarm for Respiratory Analysis (SARA)5 utilizes Smart Capnography alarm management technology to recognize and reduce clinically insignificant respiratory alarms, while accurately reflecting the patient’s condition and preserving clinically significant alarm vigilance.

SARA can be found only in Microstream® Capnography-equipped patient monitors, including the Capnostream® 20 bedside patient monitor.
Clinical Validation

With SARA, respiration rate (RR) alarms were reduced by 53% overall, and short duration alarms, lasting less than 10 seconds, were reduced by an additional 19%. **No significant RR alarms were missed with SARA.** See Figure 1 for the comparison of reduction of RR alarms and alarm duration.6

When installed at a hospital in Ohio, the institution reported a substantial reduction in clinically insignificant RR alarms and fewer Respiratory Care clinician complaints.

**Figure 1:** Comparison of alarm events both with and without SARA. Fifty six monitoring periods at 2 hours with the low respiratory rate alarm set at 8 breaths per minute.


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