

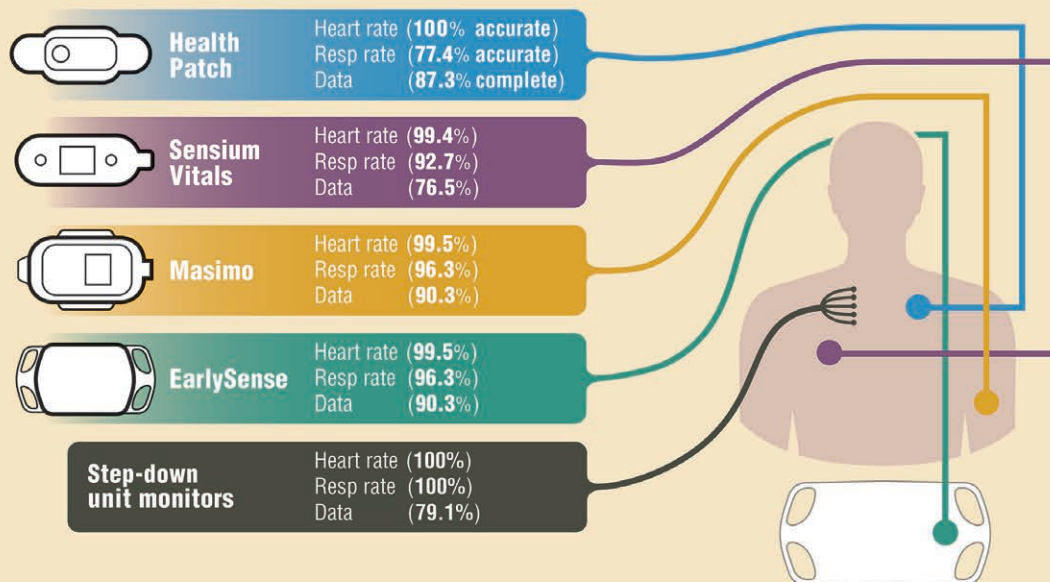
# INFOGRAPHICS IN ANESTHESIOLOGY

Complex Information for Anesthesiologists Presented Quickly and Clearly

## Continuous Postoperative Monitoring: Validation of the Next Frontier

Up to 60% of patients who suffer cardiac arrest on the hospital wards have abnormal vital signs hours before the event.<sup>1</sup> Wearable monitors could detect those abnormalities, but they have undergone limited real-world validation.

**Breteler *et al.*<sup>2</sup> monitored 25 high-risk patients after surgery, comparing 4 wearable devices to reference intensive care-grade bedside monitoring. They analyzed a total of 720 h of vital signs.**



**Most wearable devices<sup>3</sup> were highly accurate for determining both heart rate and respiratory rate. Next steps in using these devices should focus on:**



Workflow integration



Alarm management



Education

Accuracy was defined as the percentage of paired data elements in zone A or B of the Clarke Error Grid. Data completeness was defined as the percentage of total monitoring time for which data were received, averaging heart rate and resp (respiratory) rate.

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