

SPOK ALARM SURVEILLANCE POWERED BY BERNOULLI

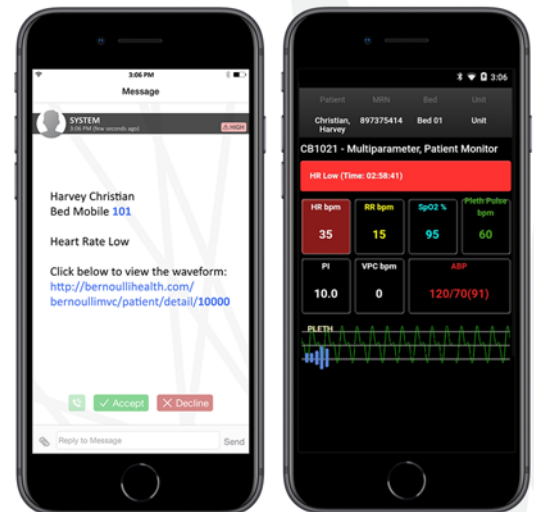


Today's patient care devices (PCDs) generate a lot of valuable information that requires clinicians' time and attention. The problem is that it's not being shared in meaningful ways with the right people, often resulting in alarm fatigue among the care team and slower response to critical events. This can lead to challenges in patient care, safety, and satisfaction.

SPEEDING RESPONSE TO ACTIONABLE ALARMS

Spok Alarm Surveillance powered by Bernoulli gives care teams easy access to real-time patient data, including live streaming waveforms. Unlike traditional alarm management systems that are dependent on alarms triggered by the PCD, Spok Alarm Surveillance includes integration of comprehensive, continuous patient data to enable advanced smart alarms and a more holistic view of the patient status, while actively filtering out nuisance and non-clinically actionable alarms from devices.

Spok can then send these filtered alarms to health professionals on a variety of mobile devices, including smartphones, encrypted pagers, Wi-Fi phones, tablets, etc. This includes rules for escalating the alarm to a different device that the clinician might be carrying, or to another person altogether if the alarm is not responded to within a pre-determined amount of time. Spok can direct these alarms based on schedules, allowing critical alerts to go to specific on-call roles instead of named individuals.



REDUCING ALARM FATIGUE

Care teams rely on PCD and clinical system alerts to inform them of patient status and needs, but the sheer volume of alerts can quickly become problematic. False positives from loose leads, redundant alerts from poorly set thresholds, and notifications for patients under someone else's care are just the beginning. Not only are alerts often distracting and difficult to decipher, but they can also be downright dangerous if excessive alarms lead care teams to become desensitized.

Through integration with a variety of PCD and clinical systems such as ventilators, pulse oximeters, and patient monitors, Spok Alarm Surveillance captures live streaming patient data to create unique smart alarms by taking into consideration various measurements. These smart alarms include:

Combination Alarms – When two or more independent patient measurements violate specific limit thresholds simultaneously.

Consecutive Alarms – When a patient measurement goes in and out of a limit threshold a given number of times over a specified amount of time.

Sustained Alarms – When a patient measurement violates a specific threshold for a specified minimum period of time.

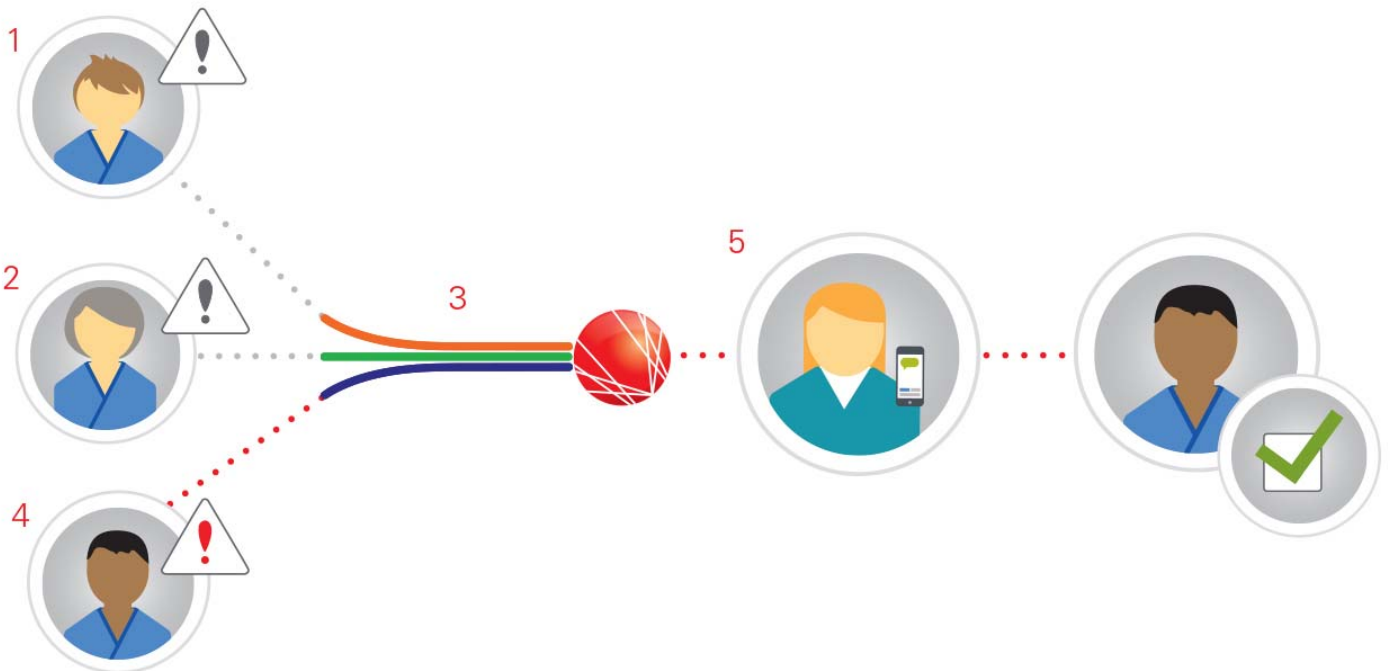
Smart alarms from Spok Alarm Surveillance evaluate real-time patient parameters and apply advanced rules to generate only actionable alarms, thereby suppressing unnecessary interruptions to the care team. Smart Alarms can also be used in combination thereby increasing their clinical flexibility and utility. Delivery of actionable alarms supports better clinical decision-making, speeds response times, reduces alarm fatigue, and improves patient satisfaction.

PATIENT CONTEXT

Spok Alarm Surveillance is a FDA 510(k)-cleared solution that captures and correlates real-time patient data from the various PCDs, including live streaming waveforms, pulse rate, blood pressure, temperature, and oxygen saturation. Upon receiving a smart alarm notification from Spok, care teams can remotely view this critical data using their smartphones. These advanced remote monitoring capabilities provide staff with the additional clinical context needed for fast decision-making around important clinical events, thus helping to improve staff efficiency and patient outcomes.

Filter Alarms to Send Actionable Alerts

1. A patient's monitor registers a drop in his blood oxygen saturation levels for several seconds before it returns to normal.
2. A patient in another room coughs, triggering a peak airway pressure alarm from her ventilator, but the device continues to operate normally and the patient requires no clinical intervention.
3. Based on the hospital's defined prioritizations, Spok Alarm Surveillance filters out these non-actionable alarms and does not pass them through to interrupt the nurse.
4. A third patient's monitor measures decreased heartbeat and respiration rates – each change not enough to activate the monitor's individual alarms, but together clinically significant – triggering a combination smart alarm.
5. Spok routes the alert to the nurse's mobile device. The nurse makes an informed decision to visit that patient for appropriate follow-up.



From connectivity, to surveillance, to delivery – Spok Alarm Surveillance can help you meet your goals for to helping to reduce staff alarm fatigue, improve patient safety, and meet The Joint Commission NPSG.06.01.01 requirements for clinical alarm safety.