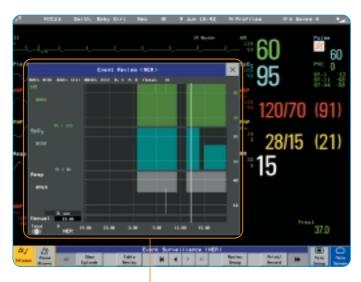# Neonatal Event Review and Oxy-CRG   documenting goal-directed neonatal information

Neonatal Event Review detects and documents apnea, bradycardia, and desaturation and provides information for diagnosis and management of neonatal intensive care patients. Clinicians can designate any combination of apnea, bradycardia, or hypoxia as a significant neonatal "event." Oxy-CRG (oxy-cardiorespirography) combines the compressed trends of a neonate's beat-to-beat heart rate, respiration, and oxygenation levels in an easy to interpret display on Philips patient monitors. Oxy-CRG is an indicator of breathing efficiency and brain maturity.

Neonatal Event Review displays the number, severity, and distribution of events.

Supporting goal-directed therapy

Neonatal Event Review information contributes to decision making by highlighting characteristics and sequences of neonatal events that could have 'predictive' value. Knowing the number, severity, and distribution of events can help identify underlying diseases and supports the delivery of the most appropriate treatment.

Automatic detection and storage

Neonatal Event Review contributes to overall efficiency by automating the documentation of up to 50 events over a 24-hour period. This saves time and helps reduce errors associated with manual documentation.

Neonatal Event Review provides:
• Automatic capture of events
• 24-hour event review window
• Storage of 4 minutes of an Oxy-CRG episode for up to 50 events over 24 hours for retrospective review

Oxy-CRG information at a glance

The Oxy-CRG algorithm facilitates more comprehensive evaluation of patient status by:
• Allowing review of the most recent six minutes of Oxy-CRG information.
• Helping to detect critical conditions, including apneic spells, obstructive apnea, mixed apnea, periodic breathing, and disturbed breathing
• Supporting documentation via 1, 2, or 3cm/min Oxy-CRG recording

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References

Huch, Albert Huch, Gösta Rooth. An atlas of oxygen-cardiorespirograms in newborn infants. Wolfe Publications Ltd 1983

Oxy-cardiorespirography application note, Philips 2003

Hunt CE. Cardiorespiratory monitoring. Clin Perinatol. 1991 Sep;18(3):473-95. Review.

Finer NN, Barrington KJ, Hayes BJ, Hugh A. Obstructive, mixed, and central apnea in the neonate: physiologic correlates. J Pediatr. 1992 Dec;121(6):943-50.

Event documentation

Philips offers a bedside recorder or printer, or a central printer for documenting neonatal events and stored Oxy-CRG episodes. Documentation supports hospital release criteria and can be added to the patient record for recall as required.

Twenty-four hours of clinical data is provided at one glance, clearly displaying changes in patient status from one day to the next.

Neonatal Event Review report.

Philips Commitment to Measurement Technologies

Philips is committed to providing best-in-class standard clinical measurements as well as innovative measurements to support clinicians' decisions at the patient's side.

Philips continues to build on its proven measurement expertise by:

- Maintaining and advancing the performance of existing, widely used standard-of-care measurements
- Investing heavily in research, development, and clinical validation of new, innovative parameters and algorithms
- Working with strategic partners to integrate next-generation measurements and technologies
- Providing interfaces to more than 100 third-party specialty measurement devices through the Philips VueLink module

Four minute Oxy-CRG episodes: For each detected neonatal event, the monitor stores the surrounding four minutes of Oxy-cardiorespirogram for later review, analysis, and documentation.

C04   Neonatal Event Review