CCHD and Pulse Oximetry

Every year, roughly 18 out of 10,000 babies will be born with critical congenital heart defects (CCHD).¹ Some of these babies will be discharged without a diagnosis and may be at risk for serious complication or death.¹ A simple pulse oximetry screening test for CCHD could help detect CCHD before these babies ever leave the hospital. In support of these screenings, the United States Department of Health and Human Services includes pulse oximetry screening for critical congenital heart defects (CCHDs) in their Recommended Uniform Screening Panel.

Since 1993, Nellcor™ pulse oximetry technology has been utilized on more than 123,000 newborns spanning five separate clinical studies evaluating the use of pulse oximetry for critical congenital heart disease screening.²-⁶ Nellcor pulse oximetry has been shown to be a simple and economical tool to aid healthcare providers in CCHD screening.⁶ Using Nellcor pulse oximetry technology, hospitals have a simple, efficient way to complete CCHD screenings and identify patients at risk and give them the care they need.

Nellcor™ Oximax™ neonatal sensors provide the most accurate measurement of SpO₂.³

<table>
<thead>
<tr>
<th>Neonatal Accuracy Comparison⁷,⁸</th>
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<tr>
<td><strong>SpO₂</strong>, Range 70%-100%</td>
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<tr>
<td>Nellcor OxiMax Pulse Oximeters</td>
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<td>with indicated sensors</td>
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- CCHD screening calls for accuracy of +/-2%, not infant accuracy
- Covidien Nellcor has +/-2% accuracy with our MAXN, MAXI, SC-PR and SC-NEO sensors
Heart Disease (CCHD) Screenings

Using the Nellcor™ Portable SpO₂ Patient Monitoring System, PM10N for Critical Congenital Heart Disease (CCHD) Screenings

The Nellcor™ Portable SpO₂ Patient Monitoring System can be effectively used as a tool for CCHD screening. This convenient, handheld monitor is intended for both spot-checks or continuous monitoring, and incorporates Nellcor™ digital signal processing technology to deliver accurate, reliable SpO₂ and pulse rate values even during low perfusion and signal interference, including patient motion.

During a CCHD screening, clinicians can select from the entire line of Nellcor™ sensors, based on the patient's needs. With the monitor's intuitive interface and color LCD screen, it is easy to observe and collect readings for SpO₂, pulse rate, SatSeconds alarm management and pleth waveform information. The monitor can collect up to 80 hours of data, and communicates with analytics tools and patient management systems.

Offered at an economic price point, the monitor’s portable design makes it a well-suited tool for CCHD screenings because it can be used in tandem with another monitor to take measurements on the hand and foot. Clinicians can trust Nellcor™ OxiMax™ technology to provide an accurate and robust assessment during the screening. This data, collected second by second, can be conveniently downloaded and compared against the other readings. The Nellcor™ Portable SpO₂ Patient Monitoring System provides clinicians an effective and reliable tool to complete CCHD screenings on their patients.

For more information on Nellcor™ Portable SpO₂ Patient Monitoring System, PM10N, please visit: covidien.com/rms/PM10N

9. Internal Covidien Research.