Monica Novii Wireless Patch System

Empowering you and your patients

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It's time for something different.

Patients are looking for more in their birthing experience and care providers are ready for something new. Empowering caregivers and patients with a solution that puts patient comfort first while helping to optimize caregiver workflow.

The Novii™ Wireless Patch System – ***A truly special delivery***.

The Novii Wireless Patch System is an intrapartum Maternal/Fetal Monitor that non-invasively measures and displays fetal heart rate (FHR), maternal heart rate (MHR) and uterine activity (UA)*. The Novii acquires and displays the FHR tracing from abdominal surface electrodes (Novii Patch) that pick up the fetal ECG (fECG) signal. Using the same surface electrodes, the Novii also acquires and displays the UA tracing from the uterine electromyography (EMG) signal and the MHR tracing from the maternal ECG signal (mECG).

Studies have shown that the majority of patients monitored on Novii technology felt comfortable or very comfortable.[1]

Patient Comfort

Patients expect more during their labor and birthing experience and caregivers are looking for ways to increase patient satisfaction. Patients are often uncomfortable during labor and restrictions on movement can make that discomfort increase. Patients are looking for more.

Freedom

Novii enables freedom of movement with a **belt-free** laboring experience to help empower mom and enable caregivers to provide personalized care. Patients can have the freedom to choose their laboring position and ambulation activity. Novii enables the freedom to move unassisted around the room while getting the gentle care needed from caregivers. When your patient is resting or just enjoying a private moment with a loved one, Novii's ***'no repositioning'*** technology allows patients the freedom to labor without the need for transducer repositioning once a good connection has been established.

Mobility

Restrictions in mobility can increase patient perceived level of pain and tension during labor.[2] Movement can increase a patient's sense of control, while a lack of movement has been shown to decrease the effectiveness of contractions and thus fetal descent.[3]

Novii enables mobility, such as upright positions and walking, which studies have shown may ***help decrease the length of labor***.[3] Novii leverages digital innovation to wirelessly communicate patient data removing the need for cords between the patient and the fetal monitor.

Choice

Monitor your patient without putting restrictions on labor and birthing choices. Empower your patients to do what is best for them and provide flexible choices during labor.

The Novii Patch & Pod, when connected, are **waterproof** and can be left in place during a bath or shower.** For those patients receiving an epidural placement, FHR monitoring can continue unrestricted by cords or belts. Empower your patients with choice.

Create a wireless experience for your patient and empower your patients with Novii mobility.

Break free and give patients the freedom to mobilize and to feel more comfortable.[1]

Novii Patch is comprised of 5 electrodes and the Novii Pod communicates via Bluetooth eliminating unnecessary wires. The Novii Patch is secured to the patient's belly via adhesive patches - this requires no belts!

Optimize your workflow

Caregivers have mastered keeping patients happy, but the reality is that caregivers are often overloaded and face an increased number of difficult to monitor patients with no additional resources. This puts an increased focus on optimizing your valuable time and resources. You deserve more.

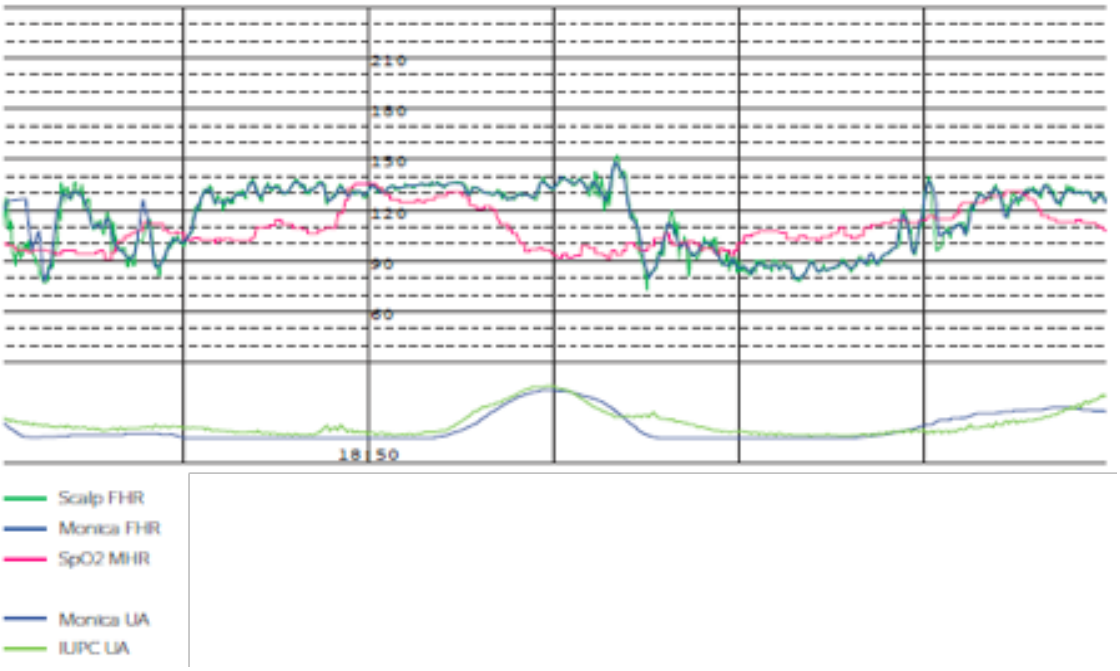
Confidence

Be confident that you are monitoring the fetal heart. All caregivers should feel empowered by their technology – combined with their clinical skill - to drive the best possible outcomes.

Novii detects the Fetal ECG and Maternal ECG rather than fetal heart rate through ultrasound doppler and a separate device for maternal heartrate. This alternative method, with the Novii power to acquire, convert and process digital data, allows mECG and fECG to be simultaneously monitored and differentiated. This allows the MHR and FHR to be easily separated to help avoid maternal/fetal confusion. ***The rate of MHR and FHR confusion is less frequent with noninvasive fECG than doppler ultrasound.***[4]

Novii uses electromyogram (EMG) signals from the uterine muscle to detect uterine activity (UA) rather than through TOCO. Uterine EMG is used to extract the UA trace and has been shown in a clinical study to be equivalent to TOCO UA.[5]

Confidence for all patients - including acquiring ***reliable tracings on high BMI patients.*** Caregivers often struggle with picking up a consistent and reliable FHR and UA. FHR is especially challenging on high BMI patients, but not with Novii. Novii monitors the electrical signals on the patient's abdomen, and these signals are not compromised by high BMI.[6]



This is data from the multi-center clinical trial showing the FSE FHR, IUPC UA and SpO2 MHR traces used to manage the patient. Superimposed are the simultaneously monitored Monica UA and FHR. The Monica UA and FHR trace was not seen by the Doctors and Nurses managing the patient.

Your Time

Your time is valuable and you deserve technology that helps you focus on your patient – not the technology. When intermittent monitoring is done for MHR, precious time is used to get that information. With Novii, no separate monitoring devices are needed – MHR, FHR and UA are all integrated offering a continuous MHR tracing. This may reduce the burden of intermittent MHR checks or of using other monitoring modalities.

Using a large amount of time repositioning ultrasound transducers, to ensure a continued trace, can be a burden in your workflow. ***Frequently needing to move the transducer can increase concerns that you are missing something and can take time away from focusing on the patient.*** Novii's simple, 'peel and stick' design eliminates the need to reposition transducers once the initial signal is acquired. ***There is no repositioning with Novii.*** Spend more time focused on patient care and trace interpretation, so you won't miss a thing.

Novii enables mobilization allowing patients to walk or move to other upright positions that may help improve the effectiveness of contractions and reduce the length of labor.[3] ***Positive labor progression*** can positively impact your workflow.

Ease of Integration

Traditional monitoring methods provide important patient information and have been a valuable tool for assessing labor progression and maternal/fetal status. Novii offers an alternate option in monitoring that integrates seamlessly into your existing workflow and connects with the Corometrics 259cx series monitor. Data collected with Novii can flow into your existing IT surveillance and archival system via your Corometrics monitor. Whether you are new to Corometrics or an experienced user – Novii builds on the reliability and quality of Corometrics for easy integration and use.

Integrate Novii into a wireless workflow that provides clear access to the patient without the trip hazard of cords or the need to assist the patient in moving with cords if they decide to ambulate.

> ***It's time to upgrade your monitoring with Novii.***

*Indicated for use on women who are at >36 completed weeks (37 weeks), in labor, with singleton pregnancies

**Rated for total water immersion to 1 meter. The Novii Pod when attached to the Novii Patch can remain on the patient while taking a bath or shower, but monitoring will not work when the woman is in the bathtub and the Pod is fully submerged under water (restricting the Bluetooth signal) and cannot be guaranteed during a shower. However, the Pod needs to remain attached to the patch while exposed to water to maintain the integrity of the Patch.

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(2) Pirdel M, Pirdel L. Perceived Environmental Stressors and Pain Perception During Labor Among Primiparous and Multiparous Women. Journal of Reproduction & Infertility. 2009;10(3):217-223.

(3) Lawrence A, Lewis L, Hofmeyr GJ, Dowswell T, Styles C. Maternal positions and mobility during first stage labour. Cochrane Database Syst Rev. 2009 Apr 15 ; (2) : CD003934

(4) Cohen WR, Ommani S, Hassan S, Mirza FG, Solomon M, Brown R, Schifrin BS, Himsworth JM, Hayes-Gill BR. Accuracy and reliability of fetal heart rate monitoring using maternal abdominal surface electrodes. Acta Obstet Gynecol Scand. 2012 Nov ; 91 (11) : 1306-13.

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(6) Cohen WR, Hayes-Gill B. Influence of maternal body mass index on accuracy and reliability of external fetal monitoring techniques. Acta Obstet Gynecol Scand. 2014 Jun ; 93 (6) : 590-5.

Imagination at work

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