ivWatch Peripheral IV Monitoring Device for the Early Detection of Infiltrations

Continuous monitoring by the ivWatch Model 400 can reduce the risk of harm for pediatric patients.
A recent study found that over 50 percent of the IVs for neonates admitted to a neonatal intensive care unit (NICU) developed complications with 67 percent of those complications caused by infiltration.¹

The ivWatch Model 400 continuously monitors the IV site to detect infiltration and extravasation events before the signs may be visible, and alerts the medical staff to investigate. Early intervention can improve outcomes for the patient by reducing the risk of injury to the surrounding tissue.

Young patients are particularly vulnerable to peripheral IV (PIV) infiltrations because of their small, fragile veins, their limited communication skills, and their tendency to be very active. Beyond the potential for patient harm, every infiltration is a medication dosing and drug delivery error that can prolong hospital stays, increase health care expenses, or create significant legal risk and reputation damage for healthcare providers.

The clinical trial that led to FDA clearance for pediatric use of ivWatch Model 400 included more than 10,000 hours of IV monitoring in over 200 subjects. Analysis of the study showed that the device can aid clinicians in identifying infiltrated tissue early, in order to decrease patient harm and improve patient safety.²

During recent evaluations at several leading pediatric hospitals, the ivWatch Model 400 detected infiltration events prior to nurse assessments more than 80 percent of the time. Clinical studies confirm sensitivity values of 99 and 96 percent for yellow and red notifications respectively for the device. The ivWatch Model 400 also has the capability of detecting infiltrations in as little as 0.22 mL of IV fluid with average detection of an infiltration at just over 3 mL of IV fluid.³

The ivWatch Model 400 allows facilities using designated Philips Patient Monitors* to see infiltration detection notification on in-room patient monitors and remote nurse station monitors allowing clinicians to respond quickly to events and minimize patient harm. Infiltration/extravasation notifications as well as periodic PIV assessment data can also be integrated into the EMR through Philips Monitoring Systems.

ivWatch is committed to the continuous improvement of patient safety and the elimination of harm. Our ability to extend this improvement to children inspires and guides us as we move forward in our mission.

¹ DO110.5135/ivva.5000558
² Internal Document DR-1001041: Clinical Report - Optical Detection of Intravenous Infiltration: A Pilot Study - Phase II
³ Internal Document DR-1001024: Device Validation for Infiltrated Tissues
* The ivWatch Model 400 is compatible with Philips Patient Monitoring Systems IntelliVue MP40-90 and MX400-800 through the IntelliBridge EC10 Interface Module or IntelliBridge EC10 integral Interface Board with Open Interface Driver (ED101) and ECS ID Module.

www.ivWatch.com
1-855-489-2824
info@ivwatch.com

“The evaluating institutions are staffed by exceptionally well-trained and well-regarded clinicians in every discipline. Their protocols are rigorous and effective, which makes the sensitivity of the Model 400 in detecting infiltrations hours ahead of human detection extremely satisfying.”

Jason Naramore
Chief Technology Officer at ivWatch