isansys

Birmingham Children's Hospital

The PSE, incorporating the Isansys Lifetouch™ "smart bandage' technology for paediatrics, and other wearable sensors, is now being used as part of a ground-breaking research study at Birmingham Children's Hospital. This aims to transform the way young patients are cared for.

The study, called RAPID (Real-Time Adaptive & Predictive Indicator of Deterioration), will use biotelemetry and wireless sensors to collect real-time data on vital signs such as heart rate, breathing rate and oxygen levels. This data is then analysed to predict when a child's condition may be deteriorating, providing an early warning system with the potential to save thousands of young lives.

The research is jointly funded by a £1.8 million grant from the Wellcome Trust and the Department of Health, through the Health Innovation Challenge Fund, and aims to recruit 1,200 patients over a three year period. The RAPID programme is a collaboration between Birmingham Children's Hospital, Isansys Lifecare, McLaren Applied Technologies, Aston University and the University of Birmingham.

"*This technology is truly transformational. It allows us to analyse many more patients' data in real-time for the first time in the same way that various other high-risk industries have done for years. The ability to track and identify deterioration towards a cardiac arrest will give doctors the chance to save the patient's life. I genuinely believe that this will change the way we care for patients in hospital forever.*"

"*I think that the idea of having wireless monitoring is the way forward. It's the obvious way to scale safer care so that you have lots of cheap, reusable sensors and very few expensive monitors and those economics will hold true in any environment.*

Dr Heather Duncan, a consultant from Birmingham Children's Hospital's Paediatric Intensive Care Unit.