Akron Children's Hospital Applies the Rothman Index to Real-Time Clinical Surveillance and Early Pediatric Sepsis Detection

Health system to test Rothman Index visual trend dashboards from PeraHealth to help reduce pediatric sepsis

CHARLOTTE, N.C. February 19, 2019 – Akron Children's Hospital is entering a partnership with PeraHealth to apply predictive analytics technology based on the Rothman Index. Recognized for leading the way to healthier futures for children through quality patient care, education, advocacy, community service, and medical discovery, the hospital will conduct research using PeraHealth's Pediatric Rothman Index (pRI) to detect subtle, potentially life-threatening changes in patient condition.

The Rothman Index (RI) is the first algorithm that automatically derives one simple score from the vast amount of data in the electronic medical record to create a picture of any patient's condition over time – any age, any disease, any care setting. Because the data feeding the Rothman Index reflects the real-time status of multiple body systems, it captures subtle changes in patient condition – often hours or days earlier than existing vitals-based algorithms.

During 2019, the hospital will identify approaches for a pediatric sepsis surveillance research project based on the Pediatric RI, or pRI. PeraHealth will support the hospital's multidisciplinary research efforts to better understand and identify mechanisms for sepsis detection in pediatrics by collaborating with the hospital to compare Pediatric Early Warning Scores (PEWS) and the pRI for identification of patients at an elevated risk for deterioration. In addition, PeraHealth will assist in identifying opportunities for quality improvement around clinical documentation.

"Through the use of Perahealth's predictive analytics model, we hope to be able to more quickly identify a child's clinical decline and allow more time for intervention, and improve care for specific conditions like sepsis," says Sarah Rush, MD, Director of Neuro-Oncology and Chief Medical Information Officer. "This is about improving outcomes with early recognition and action."

The pRI accommodates age-dependent factors in the computation of the RI to ensure it correctly reflects pediatric patient condition. The pRI is an automated, continuously age-adjusted measure of inpatient risk.

"The Rothman Index is overcoming the historic problems with conventional patient warning systems, which tend to identify problems too late and generate false alerts for care teams," says PeraHealth CEO Greg White. "We look forward to collaborating with Akron Children's Hospital and helping the team proactively treat children and prevent complications."

In 2018, Akron Children's Hospital achieved Stage 7 status through HIMSS Analytics, a not-for-profit subsidiary of the Healthcare Information and Management Systems Society. This puts Akron Children's in the top six percent of hospitals nationwide to fully attain paperless electronic medical record (EMR) implementation.

About Akron Children's Hospital
Akron Children's Hospital is ranked among the best pediatric hospitals by U.S. News & World Report, but it's our compassionate approach to treatment that makes us truly exceptional. To ensure families have convenient access to care, we have two hospital campuses in northeast Ohio and 60+ primary, specialty and urgent care locations. We collaborate with many community partners to bring our neonatal and pediatric expertise to patients in their healthcare facilities. Through our Children's Home Care and School Health programs, our nurses treat kids where they live and learn. With more than 1 million patient visits in 2017, we've been leading the way to healthier futures for children through quality patient care, education, advocacy, community service, and medical discovery since 1890. Learn more at **akronchildrens.org**.

About PeraHealth
PeraHealth is a software company that uses the Rothman Index to transform the clinical and financial efficiency of healthcare. The Rothman Index is the first algorithm that derives one simple score from the vast amount of data in the electronic medical record to create a picture of any patient's condition over time – any age, any disease, any care setting. It is the only algorithm proven to reduce mortality in practice. Other results include reducing length of stay and readmissions. Our customers are leading hospitals and clinicians who need to identify patients at risk of rapid decline, make decisions about transfer and discharge, predict the risk of severe infection, and improve the overall efficiency and quality of care. For more information, visit PeraHealth.com and @PeraHealth.

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