



INSIDE PEDIATRICS

BABY NINJA FIGHTS BACK

The Pediatric and Infancy Center for Acute Nephrology (PICAN) at Children's of Alabama, in partnership with the University of Alabama at Birmingham (UAB) Department of Pediatrics, has served children in Alabama and across the world since its 2013 inception. PICAN's three-pronged model provides the best available comprehensive multidisciplinary clinical care, education and research for children with acute kidney injury (AKI) and neonates with kidney disease.

"We believe that if we provide the best care, make important discoveries and educate our staff and those beyond our institution, we can make a huge impact in this field," said David Askenazi, M.D., PICAN director and UAB professor of pediatrics.

As a part of its efforts, PICAN implemented Nephrotoxic Injury Negated by Just-in-Time Action (NINJA), a collaboration between Children's and Cincinnati Children's Hospital Medical Center. Via NINJA, hospitalized patients receiving medications that can cause kidney injury are automatically identified by using the electronic medical record system and scheduled for dose adjustments and increased renal function surveillance. The rate of acute renal injury in inpatients has been decreased by more than 60 percent, resulting in substantially decreased morbidity across the hospital and reduced hospitalization duration. The NINJA program is so successful that this year it became the first new program added to the Solutions For Patient Safety consortium and instituted at 147 children's hospitals worldwide.

A recent application of NINJA in Children's Neonatal Intensive Care Unit (NICU) referred to as Baby NINJA, a project exclusive to Children's, has nearly eliminated medication associated acute kidney injury in the most vulnerable premature infants. In March 2018, Baby NINJA won the Best Abstract Award at the 23rd International Conference on Advances in Critical Care Nephrology in San Diego, California.

"What's exciting about Baby NINJA is the simplicity of the approach," said Christine Stoops, D.O., MPH, UAB pediatric neonatology fellow and Baby NINJA co-investigator. "It's looking at all infants exposed to nephrotoxic medications for potential kidney injury with a daily lab level (serum creatinine), and paying careful attention to whether a baby still needs these medications or can benefit from a lower daily dose."

"With that easy shift in our mindset, we have shown greater than an 80 percent reduction in kidney injury in high-risk patients," Stoops said. "This has the potential to reduce chronic kidney disease in these already at-risk infants."

For more information, visit www.childrensal.org/nephrology.



Christine Stoops, D.O., MPH, a UAB pediatric neonatology fellow, is a co-investigator of Baby NINJA, a project exclusive to Children's of Alabama that has nearly eliminated medication associated acute kidney injury in the most vulnerable premature infants.