

newborn intensive care unit



about us

Our NICU is the most comprehensive NICU in the region and is the main referral center for premature and sick newborns. Newborns who reach our center have a 99% survival rate and a low incidence of complications.

At Dayton Children's, we believe that parents and caregivers are the most important members of the care team. For nearly 50 years we have provided our NICU patients with family-centered care in a friendly, developmentally supportive and healing environment.



David Yohannan, MD, Division Chief newborn medicine/

a family approach

The newborn intensive care unit (NICU) at Dayton Children's Hospital has recently implemented its Family Integrated Care Program (FICare). FICare is a model of care based on the principles of the family-centered care model. In the NICU, family integrated care involves NICU staff supporting parents as they take on a more active role in the care of their baby.

The goal of FICare is to engage parents in the care of their infant in a way that allows them to feel empowered, comfortable and confident in caring for their baby. Studies show that NICU parents often feel as though they cannot provide meaningful care for their infants, that they often feel detached from their babies, and that they feel unsure about their abilities to care for their infants once they go home. By helping parents feel more engaged and giving them back some control through education and support, we can help lower the effects of stress related to being in the NICU.

by the numbers

Our NICU is designed to meet the special needs of our medically fragile patients. Throughout 2020, our team helped families develop close bonds with their little ones as they grew stronger under our care.



18

physicians/advance practice providers on staff



880

total admissions



598

total transports



66,080

newborn diapers used



0

instances of CAUTI or CLABSI



FETAL TO NEWBORN
CARE CENTER

MIAMI VALLEY HOSPITAL | DAYTON CHILDREN'S HOSPITAL

The Fetal to Newborn Care Center, a unique collaborative between Dayton Children's Hospital and Miami Valley Hospital, brings decades of experience caring for the most critically-ill newborns. In fact, more than 80% of critically-ill newborns in the region are cared for by these two hospitals. **Learn more.**



N-PASS pain and sedation project

Infants who are the most preterm and most ill are vulnerable and at risk for a greater number of procedures. These infants exhibit unique responses to pain and may have little to no energy stored to display a response. The Dayton Children's NICU developed a pain scale in 2000 to objectively measure pain in preterm and ill neonates. Over the years, the NICU population has changed and the scale was no longer meeting the needs of these infants. A team of NICU staff, including the clinical nurse specialist, nurse practitioners and staff nurses conducted an evidence-based practice project to determine the most appropriate pain scale. The team critically appraised 20 articles, determining that the Neonatal Pain and Sedation Scale (N-PASS) would best meet the needs of the current NICU population. Education was provided to NICU staff and use of N-PASS was implemented in September 2020. The scale helps to quantify the severity of pain and level of sedation for an infant. The pain and sedation scores are discussed daily in interdisciplinary rounds and plans for pain and sedation are modified as needed. Building on this, the team is developing pathways for pain and sedation management along with medication orders to provide for infantspecific pain and sedation needs.

antimicrobial stewardship program

The NICU at Dayton Children's has implemented an antimicrobial stewardship program. This program was developed to achieve optimal clinical outcomes related to antimicrobial use, while minimizing toxicity and other

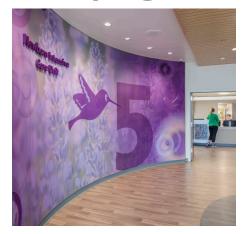
adverse events and the emergence of antimicrobial-resistant organisms. Since the implementation of the policy in December 2019, the team has been consistently over 95% compliance.

mandibular distraction pathway

The NICU team at Dayton Children's works collaboratively with the plastic surgery, ENT and sleep divisions using the mandibular distraction osteogenesis pathway to determine whether a child with micrognathia/retrognathia requires surgery. Following an airway

evaluation and sleep study, the multidisciplinary team determines whether surgical intervention is needed to lengthen the child's jaw bone to ensure proper eating and breathing can be achieved.

NICU programs and services



- Fetal to Newborn Care Center
- Nurse navigator to support expecting moms through pregnancy and delivery
- Newborn follow-up clinic
- Partnership with Ohio Health Mother's Milk Bank
- Therapeutic hypothermia treatment provided during transport
- Ability to provide continuous EMU monitoring for HIE patients

