

INSIDE PEDIATRICS

Children's of Alabama ECMO Program Marks 30 Years

The Extracorporeal Membrane Oxygenation (ECMO) program at Children's of Alabama marked its 30th anniversary in 2017. Since the program's start in 1987, the Children's ECMO team has cared for almost 800 children – 639 infants, 66 respiratory patients and 82 cardiac patients.

ECMO uses a heart-lung bypass machine to provide oxygen to the blood while allowing the heart and lungs to heal. Most patients requiring ECMO are newborns who have difficulty after birth due to infection, meconium aspiration, congenital diaphragmatic hernia or pulmonary hypertension, cardiac patients, or children suffering from respiratory failure infections. ECMO is only used after all other medical treatment has failed and the odds of survival without it is less than 20 percent. The overall survival rate of ECMO-supported patients is 74 percent.



Since 1987, Children's of Alabama's ECMO program has cared for almost 800 children. ECMO uses a heart-lung bypass machine to provide oxygen to the blood while allowing the heart and lungs to heal.

Children's is among the first pediatric hospitals in the Southeast to offer ECMO and is the only program of its kind in Alabama. The program began with one ECMO machine to support infants with lung disease in the neonatal intensive care unit. By 1989, a second machine was added to treat older children. In 2012, the program moved from the University of Alabama at Birmingham to Children's, which opened the Benjamin Russell Hospital for Children to patients that year. With the addition of cardiac ECMO, the number of ECMO-supported patients doubled annually. Today, Children's is equipped with eight machines and supports an average of 42 critically ill patients per year.

In 2016, the program received the Platinum Level Extracorporeal Life Support Organization (ELSO) Award for Excellence in Life Support. The award recognizes programs worldwide that distinguish themselves by having processes, procedures and systems in place that promote excellence and exceptional care in ECMO. Only five programs in the world have earned Platinum Level status.

The Children's ECMO program is staffed by trained Extracorporeal Life Support Specialists, including 40 registered nurses, two respiratory therapists and four perfusionists. The physician team includes pediatric surgeons, a pediatric intensivist and a neonatologist. For more information about the ECMO Program, visit childrensal.org/ecmo.