About NPC-QIC

The National Pediatric Cardiology Quality Improvement Collaborative (NPC-QIC) is a network of 60 pediatric cardiology care centers across the United States and the District of Columbia. With our parent partner organization, Sisters by Heart, we work together with families, clinicians, researchers, and patients to dramatically improve the outcomes for children with cardiovascular disease.

Find out more information by visiting our webpage, atnpcqic.org, or by emailing us at info@npcqic.org.

OUR GOALS
The overarching goal of NPC-QIC is to improve outcomes for children with cardiovascular disease. The initial project focused specifically on improving the survival and quality of life of infants with a univentricular heart during the “interstage” period following a Norwood operation (between their first and second heart surgeries). As these efforts in the interstage continue, the second phase of The Collaborative will also focus on care and outcomes of these infants from diagnosis through the child’s first year of life.

OUR RESULTS
Since inception, NPC-QIC has developed and supported a robust national registry comprised of clinical process and outcome data on the care of infants in the “interstage” period. Using this data, The Collaborative has been able to engage pediatric cardiology programs across the nation and implement quality improvement strategies to standardize and improve care for these infants. We identified a growth bundle of several factors that contribute to improved growth during the interstage – a time period of particularly poor growth for these infants.

Importantly, the registry data document a significant reduction in interstage mortality for infants cared for by teams participating in the collaborative.

Cumulative aggregate interstage mortality for these infants decreased from 9.5% to 5.1%, a relative reduction of 46%. We estimate this to be approximately 44 lives saved, or the equivalent of two classrooms of kindergartners. Performance on key process measures also improved. The Collaborative was able to conclude that this reduction in mortality was most likely related to improved reliability of key care processes (e.g. care transition and care coordination planning).

For additional results related to our progress, check out our official webpage (npcqic.org) where you will find the most up-to-date information.

OUR MISSION
NPC-QIC is a pediatric research and quality improvement network with the mission to decrease mortality and improve quality of life for infants with single ventricle congenital heart disease and their families.

OUR APPROACH
Harnessing the power of the collaborative learning network, NPC-QIC practices methodology aligned with the Model for Improvement (an improvement science method developed and endorsed by the Institute for Healthcare Improvement). It is with this approach that patients, clinicians and researchers all work together to improve the outcomes of care for children with congenital heart disease. Additionally, an adapted Breakthrough Series Model is used, for engaging and working with cardiology teams throughout The Collaborative, to help teams learn from one another. This model promotes the use of rapid Plan-Do-Study-Act (PDSA) cycles where care teams address problems by testing interventions and subsequent modifications in small steps to achieve desired change.

This network is supported by the Centers for Education & Research on Therapeutics. NPC-QIC is also supported by the Children’s Heart Association of Cincinnati. The content is solely the responsibility of the authors and does not necessarily represent the official views of these agencies. The network faculty leads and project staff are members of the James M. Anderson Center for Health Systems Excellence at Cincinnati Children’s Hospital Medical Center.
Our Hospitals
A total of 60 sites in 32 states and the District of Columbia currently participate in NPC-QIC.

- Advocate Children’s Hospital
- Akron Children’s Hospital
- Ann and Robert H. Lurie Children’s Hospital of Chicago
- Arizona Pediatric Cardiology
- Arkansas Children’s Hospital
- Arnold Palmer Children’s Hospital
- Batson Children’s Hospital-University of Mississippi Medical Center
- Boston Children’s Hospital
- Children’s Hospital and Research Center Oakland
- Children’s Hospitals and Clinics of Minnesota
- Children’s Medical Center Dallas
- Children’s National Medical Center
- Children’s Healthcare of Atlanta
- Children’s Hospital and Medical Center, Omaha
- Children’s Hospital Colorado
- Children’s Hospital Los Angeles
- Children’s Hospital of Philadelphia
- Children’s Hospital of Pittsburgh of UPMC
- Children’s Hospital of Wisconsin
- Children’s Mercy Hospitals and Clinics - Kansas City
- Children’s of Alabama
- Cincinnati Children’s Hospital
- Cleveland Clinic Children’s Hospital
- Doernbecher Children’s Hospital
- Duke University Medical Center
- Inova Children’s Hospital
- Joe DiMaggio Children’s Hospital
- Johns Hopkins All Children’s Hospital - Heart Institute
- Johns Hopkins Hospital
- Le Bonheur Children’s Hospital – Memphis
- Levine Children’s Hospital - Sanger Heart and Vascular Institute
- Lucile S. Packard Children’s Hospital Stanford
- Mattel Children’s Hospital UCLA Pediatric Cardiology
- Medical University of South Carolina
- Monroe Carrell Jr. Children’s Hospital at Vanderbilt
- Nationwide Children’s Hospital
- Nemours Cardiac Center, A.I duPont Hospital for Children
- New York Presbyterian - Morgan Stanley Children’s Hospital
- Nicklaus Children’s Hospital
- NYU Medical Center
- Penn State Hershey Children’s Hospital
- Primary Children’s Hospital
- Riley Hospital for Children
- Seattle Children’s Hospital
- S. Louis Children’s Hospital
- Sutter Medical Center-Sacramento
- Texas Children’s Hospital
- The Children’s Hospital of Montefiore
- UC Davis Children’s Hospital
- University Hospitals Case Medical Center - Rainbow Babies & Children’s Hospital, Pediatric Heart Center
- University of Florida, UFHealth
- University of Florida Pediatric Cardiovascular Center at Wolfson Children’s Hospital
- University of Iowa Children’s Hospital
- University of Louisville – Kosair Children’s
- University of Maryland Children’s Hospital
- University of Michigan C.S. Mott Children’s Hospital
- University of Minnesota Masonic Children’s Hospital
- University of Rochester Medical Center
- University of Texas Health Science Center, San Antonio (UTHSCSA) at University Hospital
- UVA Children’s Hospital

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