

KPCO Criteria for Center of Excellence designation, for Comprehensive Care Centers Performing Pediatric Cardiovascular Surgery

The following criteria specify the facilities, experience, outcomes, and personnel required of comprehensive pediatric cardiac surgery programs to participate in CO Kaiser Permanente's network.

FACILITIES and STRUCTURE

- 1) The program, within a Children's Hospital, must maintain continuous accreditation by a CMS deemed accrediting organization
- 2) The hospital must have a Level IV NICU and a Pediatric CICU, each with a unit-dedicated Medical Director and Nursing Director, appropriately staffed with pediatric critical care nurses trained in hemodynamic support and management of immunocompromised patients. There must also be adequate staffing of unit-dedicated respiratory therapists.
- 3) The program must have an active cardiovascular medical and surgical program, with the capacity to provide cardiac surgery and cardiac catheterization on an emergency basis at any time.
- 4) The program should perform at least 200 surgeries for congenital heart disease per year.
- 5) The Pediatric Catheterization Lab should be available 24 hours a day, 365 days a year. Cardiac biopsy should be readily available for transplant patients.

- 6) The program should have a Pediatric Electrophysiology Program with pediatric electrophysiologists.
- 7) The program must have pediatric cardiothoracic surgeons who are certified in congenital heart surgery by the American Board of Thoracic Surgery. There should be a designated Director of the Pediatric and Congenital Heart Surgery Program.
- 8) There should be a Congenital Cardiac Anesthesia Team, comprised of pediatric anesthesiologists with post-residency training in pediatric cardiac anesthesiology, available 24/365, and having a designated director.
- 9) The program should have an established VAD program and pediatric heart transplantation program, with United Network of Organ Sharing (UNOS) recognition and participation in the National Transplant Services (NTS) network. The volume of heart transplants performed should exceed 10 every two years.
- 10) The transplant program must have an identified medical team for management of heart transplantation patients, as well as a medical review board that evaluates all potential candidates, in accordance with established patient selection criteria.
- 11) There must be dedicated pediatric cardiac ORs, with cardiopulmonary bypass capability, and a dedicated pediatric cardiac OR team available 24/365.
- 12) Pediatric extracorporeal membrane oxygenation (ECMO) must be immediately available, with a dry circuit available, and in-house ECMO specialists 24/365.
- 13) Safe, routine pediatric critical care transport must be readily available, including transport on ECMO.
- 14) The program must include an outpatient clinic for follow-up, as well as an Adult Congenital Heart Disease (ACHD) Program, staffed and managed by ACHD specialists.
- 15) Radiologic imaging available should include cardiac MR and cardiac CT, and pediatric radiologists with expertise in those modalities should be integrated into the program.

- 16) It is preferable that the Children's Hospital has a Fetal Care Center, including its own Maternal Fetal Medicine program, enabling the pediatric cardiac program to offer prenatal evaluation and consultation, and fetal cardiac interventions.
- 17) The hospital's ancillary services should include readily available interpreter services, child life services, onsite or nearby lodging for families and a hospital school program.

QUALITY, SAFETY and OUTCOMES

- 18) The program must have a Quality Program that encompasses Quality Improvement methodologies as well as routine quality assurance monitors and full transparency.
- 19) The program must have effective systems and personnel for data collection, tracking and analysis. Survival rates and length of stay (LOS) data, overall, by complexity and by procedure, should be continually reported to and compared with the Society of Thoracic Surgeons' (STS) database.
- 20) The pediatric cardiac anesthesia team's participation in the (STS) Congenital Heart Surgery Database anesthesia module for benchmarking is also expected.
- 21) There must be clearly delineated and active reporting relationships between the program's quality program and the institution's quality program. The program's quality program should specifically articulate which quality events are automatically reviewed by the hospital's Quality Committee.
- 22) While any KP patient is under the program's care, the program's providers must give timely status reports (clinical updates) to the referring KP physician.
- 23) The program must be willing to share its investigational protocols for transplant patients with the Kaiser Permanente National Transplant

Services network and must obtain prior authorization from Kaiser Permanente prior to enrolling pediatric KP members in any investigational protocols or clinical trials.

- 24) The program must be cooperative with Kaiser Permanente's quality program and must agree to provide records and other information as requested, or required, under Kaiser Permanente's Quality Assurance/Quality Improvement Programs.
- 25) Outcomes must be reported to all relevant, publicly available oversight organizations, including the Scientific Registry of Transplant Recipients (SRTR) for transplant patients.
- 26) The program must agree to notify Kaiser Permanente immediately upon any suspension of services pending investigation by a regulatory agency or pending internal investigation or voluntary suspension of their program, following an internal quality assessment.