

Data extraction, management, and analysis completed by PC⁴

SHORT: "The data extraction, management, and analysis for this manuscript were performed by the PC⁴ Data Coordinating Center (DCC). The University of Michigan Institutional Review Board provides oversight of the PC⁴ DCC. This manuscript has been reviewed and approved by the PC⁴ Scientific Review (or Executive) Committee."

Or

LONG: "This study utilized Pediatric Cardiac Critical Care Consortium (PC⁴) registry data. PC⁴ is a multicenter quality improvement and research collaborative in which demographic, clinical, and outcome variables from all patients admitted to the pediatric cardiac intensive care unit (CICU) at participating North American centers are captured in a clinical registry.¹ Routine audits suggest complete and accurate data.² The University of Michigan Institutional Review Board provides oversight of the PC⁴ Data Coordinating Center (DCC). This manuscript has been reviewed and approved by the PC⁴ Scientific Review (or Executive) Committee."

[Please add any additional project-specific IRB involvement and/or funding as needed. Prior to manuscript submission, the PC⁴ DCC should review to assure accuracy of all IRB and funding language.]

Data extraction completed by PC⁴, limited data set analysis completed off-site

SHORT: "The source data used for this study from the Pediatric Cardiac Critical Care Consortium (PC⁴) was extracted, reviewed, and delivered by the PC⁴ Data Coordinating Center (DCC). Analysis was performed by *[insert appropriate institution]*. The University of Michigan Institutional Review Board provides oversight of the PC⁴ DCC. This manuscript has been reviewed and approved by the PC⁴ Scientific Review (or Executive) Committee."

OR

LONG: "This study utilized Pediatric Cardiac Critical Care Consortium (PC⁴) registry data. PC⁴ is a multicenter quality improvement and research collaborative in which demographic, clinical, and outcome variables from all patients admitted to the pediatric cardiac intensive care unit (CICU) at participating North American centers are captured in a clinical registry.¹ Routine audits suggest complete and accurate data.² The source data was reviewed by the PC⁴ Data Coordinating Center (DCC) and all data analysis was performed by *[insert appropriate institution]*. The University of Michigan Institutional Review Board



provides oversight of the PC⁴ DCC. *[Appropriate institution]* provided IRB approval for data analysis. This manuscript has been reviewed and approved by the PC⁴ Scientific Review (or Executive) Committee.”

[Please add any additional project-specific IRB involvement and/or funding as needed. Prior to manuscript submission, the PC⁴ DCC should review to assure accuracy of all IRB and funding language.]

Data extracted, managed and analyzed independently by PC⁴ site(s)

NONE: No acknowledgement

OR

SHORT: "We would like to acknowledge the use of Pediatric Cardiac Critical Care Consortium (PC⁴) data in the completion of this project."

OR

LONG: “Data from the the Pediatric Cardiac Critical Care Consortium (PC⁴) quality improvement registry were used in this study. PC⁴ is a multicenter quality improvement and research collaborative in which demographic, clinical, and outcome variables from all patients with congenital or acquired cardiac disease admitted to the pediatric cardiac intensive care unit at participating centers are captured in a clinical registry.”¹

[Please add any additional project-specific IRB involvement and/or funding as needed. Consider review by PC⁴ Executive Directors prior to submission.]

Consider including the following language for a more detailed description of the PC⁴ dataset:

“The PC⁴ registry shares common terminology and definitions with applicable data points from the International Pediatric and Congenital Cardiac Code (IPCCC), the STS-CHSD, and the American College of Cardiology Improving Pediatric and Adult Congenital Treatment (IMPACT) Registry, as previously described.¹ In addition, for surgical studies, we excluded CICU admissions where the primary operation was ligation of patent ductus arteriosus in a neonate less than 2.5 kg or if it could not be classified according to the STS CHSD Mortality Categories (Society of Thoracic Surgeons-European Association for Cardio-Thoracic Surgery Congenital Heart Surgery Risk Categories [STAT]).”³

References:

1. Gaies M, Cooper DS, Tabbutt S, Schwartz SM, Ghanayem N, Chanani NK, Costello JM, Thiagarajan RR, Laussen PC, Shekerdemian LS, Donohue JE, Willis GM, Gaynor JW, Jacobs JP, Ohye RG, Charpie JR, Pasquali SK, Scheurer MA. Collaborative quality improvement in the cardiac intensive care unit: development of the Paediatric Cardiac Critical Care Consortium (PC⁴). *Cardiol Young*. 2015 Jun;25(5):951-7. doi: 10.1017/S1047951114001450. Epub 2014 Aug 28. PMID: 25167212; PMCID: PMC4344914.
2. Schuette J, Zaccagni H, Donohue J, Bushnell J, Veneziale K, Gaies M, Tabbutt S. Assessing data accuracy in a large multi-institutional quality improvement registry: an update from the Pediatric Cardiac Critical Care Consortium (PC⁴). *Cardiol Young*. 2022 Nov;32(11):1742-1747. doi: 10.1017/S1047951121004984. Epub 2021 Dec 28. PMID: 34961570.
3. Jacobs JP, O'Brien SM, Hill KD, et. al.: Refining the Society of Thoracic Surgeons Congenital Heart Surgery Database Mortality Risk Model with Enhanced Risk Adjustment for Chromosomal Abnormalities, Syndromes and Noncardiac Congenital Anatomic Abnormalities. *Ann Thorac Surg* 2019; 108: 558-66. doi: 10.1016/j.athoracsur.2019.01.069. Epub 2019 Mar 7. PMID: 30853592.