Telemedicine in pediatric cardiac critical care

Concurrent changes in demography, world-health trends, and society and information technology/social networks present a significant challenge in anticipated global health care needs in the immediate future. Hence, a new paradigm needs to be developed. Telemedicine can alleviate many of these needs and shows promising way to deliver clinical care and medical education at a distance, in both the intensive care and pediatric cardiology settings, regionally or even across international borders. In pediatric cardiac critical care in particular, telemedicine models of care need to be tailored in accordance to the different characteristics of remote hospitals, and the best ones incorporate a systematic approach during the implementation of quality improvement initiatives. When used in this way, telemedicine can accelerate the process of collective learning, empowering remote teams and allowing for significant improvement in their patient outcomes. Our intuitional experience with telemedicine in pediatric cardiac critical care is presented here with 3310 teleconsultations provided to 6 international hospitals in Latin America in the last 5 years and more than 2000 quality interventions including ECHO telementoring, ECMO-related adjustments, adverse trend detections and surgery-related recommendations. We postulate that telemedicine is an excellent tool helping to improve performance and accelerate the collective learning curve in medical teams treating pediatric patients with critical congenital heart disease.

Biography

Ricardo Munoz is the Chief of the Cardiac Intensive Care Division and Medical Director for Global Business and Telemedicine at Children’s Hospital of Pittsburgh of UPMC, and Professor of Critical Care Medicine, Pediatrics and Surgery at the University of Pittsburgh School of Medicine. He has done his training in pediatrics, pediatric critical care and pediatric cardiology at Massachusetts General Hospital and Children’s Hospital Boston/Harvard Medical School. He is the Editor of four books in the field of pediatric cardiac intensive care and is Board Certified in pediatrics, pediatric cardiology and pediatric critical care medicine. He is a Member and Counselor of Cardiac Intensive Care of the European Association of Pediatric Cardiology, and fellow of the American Board of Pediatrics, Society of Critical Care Medicine and the American College of Cardiology.

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