Monitoring mortality and morbidity after heart surgery in children: Why, what and how?

Christina Pagel
University College London, UK

Routine monitoring of outcomes following surgery can drive service improvement and was pioneered in adult cardiac surgery. Since 2001, all cardiac procedures in children have been subject to mandatory reporting and publication in the UK. But in the rapidly developing and complex area of pediatric cardiac surgery, what are the most appropriate outcomes to measure and how should they be reported? Mortality has often been perceived as a straightforward measure of outcome and is often used to evaluate surgical performance. Currently in the UK, mortality within 30 days of heart surgery in children is monitored and published by the national audit body and each hospital’s mortality outcomes are benchmarked against recent national outcomes using the PRAIS risk model. However, there are nonetheless some disadvantages to using mortality as an outcome measure. In the welcome context of falling mortality rates, morbidities following heart surgery in children are considered an ever more important outcome, but they are potentially many, much more difficult to define, more difficult to measure routinely and we do not know which morbidities are the most important to track. In this talk, the author will discuss the benefits and risks of monitoring mortality and an ongoing ambitious research project in the UK to select, define and measure morbidities following heart surgery in children.

Biography

Christina Pagel currently spends 2 days a week based as a “researcher in residence” within the critical care units at Great Ormond Street Hospital for children. A major area of research is outcomes following cardiac surgery in children in the UK. She helped develop the PRAIS risk model for deaths within 30 days following cardiac surgery in the UK which has now been adopted by all hospitals performing heart surgery in the UK and the national audit body and she is now working on a large multi-center project on monitoring morbidity following heart surgery in children.

c.pagel@ucl.ac.uk