

Title of project	IMPECT - Interventions with Music in <b>PECT</b> usexcavatum treatment.
Project leader	Prof. Dr. R.M.H. Wijnen, Sophia Childrens' Hospital
Responsible department	Pediatric Surgery
Duration of project	2 years

This study aims to investigate the effectiveness of the use of music in PE surgery, the most common chest wall deformity, in reducing preoperative anxiety and postoperative pain.

The IMPECT study will investigate the effects of music in the treatment of pectus excavatum (PE). PE is the most common chest wall deformity, affecting 0.1-0.8% of live births, and is mostly seen in males. Treatment of PE consists of surgical repair. It involves a convex steel bar inserted beneath the sternum, effectively correcting the deformity of the sternum. As all surgical procedures, this operation is accompanied by preoperative anxiety and, given the procedure, also substantial pain. Music interventions are shown to significantly reduce anxiety, distress, post-operative pain and even use of painkillers in surgical procedures with adults. This non-pharmacological method could therefore be a welcome and low-cost intervention in this radical procedure in pediatric surgery.

**Clinical relevance:** Music can be a friendly and safe way to alleviate anxiety and pain in children. When proven to be effective, this method can lead to improvement of patient experience and patient care in the hospital.

**Embedding of project:** When proven effective, music interventions will be embedded in peri-operative care in the Sophia Childrens' Hospital.

*The European Doctor's Orchestra has adopted the IMPECT study as their charity goal for the 2017 Rotterdam Concert via Friends of Sophia.*