

07

CASAP ORGANISATIONAL SURVEY - A NATIONAL SURVEY OF STRUCTURAL INDICATORS OF QUALITY CARE FOR CHILDREN UNDERGOING EMERGENCY ABDOMINAL SURGERY IN HOSPITALS IN THE UNITED KINGDOM

A.Selman¹, L. A. Sogbodjor¹, C. Razavi², R. Moonesinghe²

¹Great Ormond Street Hospital, London, UK

²UCL, UK

Introduction:

The Children's Acute Surgical Abdomen Programme (CASAP) is a prospective observational cohort study aiming to characterise the care being delivered to children between the ages of 1 and 16 years having emergency abdominal surgery in UK hospitals(1). As part of the CASAP study, we conducted an organisational survey to measure compliance against structural indicators of quality care recommended for children undergoing emergency abdominal surgery UK hospitals. The definition for abdominal surgery used for the study is as follows:

- Non-trauma related gastrointestinal surgery, including hepatobiliary (HPB) and splenic procedures and appendectomies in children aged 1-16 years, but excluding urological and gynaecological procedures

Background:

Variation in the quality of surgical care delivered to children by UK hospitals has been highlighted by several studies published over the last 3 decades(2). This has led to significant reorganisation of paediatric anaesthetic and surgical services, with a trend towards more centralised care in specialist paediatric centres for children requiring surgery. Despite this, a large proportion of paediatric surgical procedures take place outside of specialist centres(3) and there remain many challenges in improving paediatric surgical care and reducing the incidence of perioperative morbidity.

Methods:

The survey was designed using structural indicators identified in a systematic review(4) and were refined using a modified Delphi process.

We invited all UK hospitals who perform emergency abdominal surgery in children to participate and disseminated the survey via email. It ran from January 2019 to March 2020.

We identified 198 UK hospitals who would perform emergency abdominal surgery in children and received 136 completed surveys - a 69% response rate.

Results:

We identified several structural indicators that, if universal, could reduce variation in care for children undergoing emergency abdominal surgery:

- Being part of a co-ordinated paediatric surgical and anaesthetic/PCCU network(5-9)(61% surgical, 71% an anaesthetic/PCCU)

- Having a locally agreed pathway for the perioperative care of children undergoing emergency abdominal surgery (40%)
- Having a staffed and funded acute pain service that covers children (71%)
- Having a forum to review morbidity and annual outcomes (58% review morbidity, 24% review paediatric surgical outcomes annually)

Conclusions:

Hospitals surveyed met many of the structural indicators of quality care, but deficiencies remain in important areas such as participation in formal networks and locally agreed care pathways. If more hospitals were to focus on improving their compliance with these structural indicators of quality care, there is potential for them to reduce variation in care, see improvements in safety and efficiency and also a reduction in adverse outcomes for children undergoing emergency abdominal surgery in the UK.

References:

1. CASAP: Home - The National Institute of Academic Anaesthesia [Internet]. [cited 2019 Jul 23]. Available from: <https://www.niaa-hsrc.org.uk/CASAP-Home#pt>
2. Ingram, G S (Principal Clinical Coordinator N and C, Anaesthetist UCLH. The 1999 Report of the National Confidential Enquiry into Perioperative Deaths E X T R E M E S [Internet]. 1997 [cited 2021 Jun 19]. Available from: www.ncepod.org.uk
3. Alleway R, Butt A, Ellis D, Kelly K, Jarman D, Joy S, et al. Are We There Yet? A review of organisational and clinical aspects of children's surgery A report by the National Confidential Enquiry into Patient Outcome and Death (2011).
4. Sogbodjor LA, Singleton G, Davenport M, Walker S, Moonesinghe SR. Quality metrics for emergency abdominal surgery in children: a systematic review. *Br J Anaesth* [Internet]. 2021;(July). Available from: <https://doi.org/10.1016/j.bja.2021.10.045>