

# Unplanned Admission After Paediatric Day Case Anaesthesia in the UK

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on behalf of the Paediatric Anaesthesia Trainee Research Network (PATRN)

## Introduction and Aims:

- The majority of paediatric anaesthesia is performed for day case procedures
- Failure to discharge home has a negative impact on patient and family, hospital finances and provision of other services
- It is recommended that all departments regularly audit their unplanned admissions (1)
- The Royal College of Anaesthetists (RCoA) propose that unplanned admission rates should be <2% in adults (2). Paediatric admission rates may approximate this (3,4)

This project provides current figures following paediatric day case anaesthesia across the UK.

## Methods:

- UK hospitals providing paediatric anaesthesia were invited to participate
- Local audit approval was sought via each centre
- Retrospective data was collected over a 12 month period (January to December 2016)
  - ① Total number of day case anaesthetics performed
  - ② Number of unplanned admissions on the day of surgery
- Inclusion criteria: All day case general anaesthetics for children 0-16 years. Oral sedation cases were excluded

## Results:

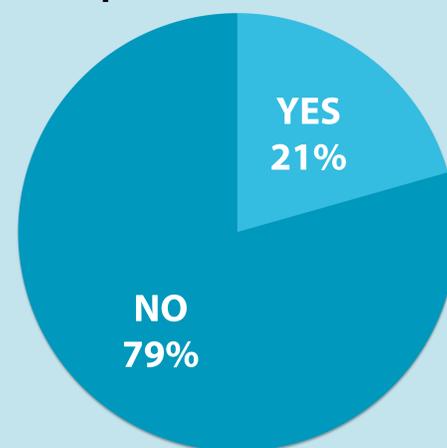
- 63 UK hospitals volunteered to participate, including 15 tertiary paediatric centres
- 10 regional trainee networks contributed
- Detailed information was available from 48 hospitals, (12 tertiary, 36 DGHs).
- Total number of day case anaesthetics from 48 centres 101381

Median unplanned admission rate 3.9% (IQ 1.4-7.5; range 0.12-16.5)  
4515 / 101381 (4.45%) patients had an unplanned admission

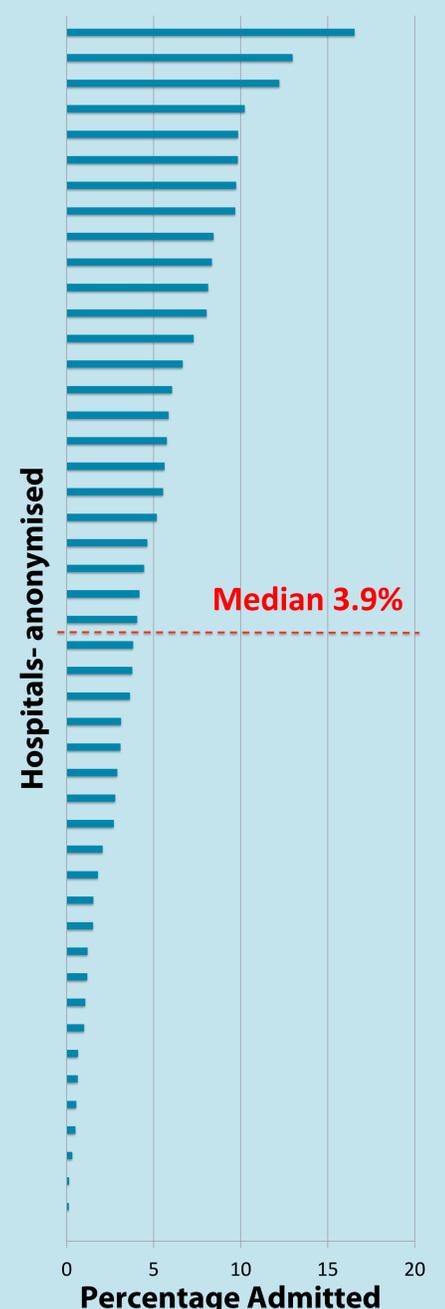
## Discussion:

- A minority of responding centres (20.6%) regularly audit their unplanned admissions as recommended by the RCoA.
- The observed rate is almost double previously reported single centre rates of 1.8-2.2% (3,4), in which orchidopexy was the most common surgical procedure leading to admission (3).
- Procedure specific information is currently not available (1) on this scale
- The wide inter-quartile range demonstrates a large variability between centres
- A number of centres commented on difficulty obtaining the data

### Hospitals Routinely Auditing Unplanned Admissions



### Admission Proportions



## Conclusions:

- The rate of routine auditing of unplanned admissions in the UK is low
- This project has formed the foundations to plan a nationwide prospective audit. The aim is to identify common contributors for unplanned admissions after paediatric day case general anaesthesia
- This will provide meaningful data to target both quality improvement and future service planning

## References:

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4. Awad IT et al. Unplanned hospital admission in children undergoing day-case surgery. European Journal of Anaesthesiology. May 2004;21(5):379-383

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