

# Unplanned admission after paediatric day case anaesthesia in the UK

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## Introduction and Aims

The majority of paediatric anaesthesia is performed for day case procedures. This is partly attributable to increasing pressure on beds and services. 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 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

The PATRN network collaborated with the Association of Paediatric Anaesthetists' Linkmen scheme and RAFT (Research and Audit Federation of Trainees), to invite hospitals performing paediatric anaesthesia to take part. PATRN representatives sought local permission from their audit departments and collected retrospective data for the total number of cases and unplanned admissions for a twelve-month period (January to December 2016). The request for providing unplanned admission figures was sent to 138 hospitals via linkmen and advertised nationally via RAFT. All elective, day case, general anaesthetics for children 0-16 years were included. Oral sedation only cases were excluded.

## Results

A total of 63 UK hospitals volunteered to take part, including 15 tertiary paediatric centres. Unexpected day case admissions were routinely monitored in 13/63 centres (21%). The total number of day case anaesthetics analyzed was 101381, with 4515 (4.45%) patients having an unplanned admission. Detailed information was available from 48 hospitals with a median unplanned admission rate of 3.9% (IQ 1.4-7.5; range 0.12-16.5).

## Discussion

This project provides data from a large number of centres following paediatric day case anaesthesia in the UK. Only 21% of responding centres do regularly audit their unplanned admissions as recommended by the Royal College of Anaesthetists. The current rate is almost double the previously reported rate of 1.8-2.2% (3,4), where orchidopexy was the most common surgical procedure leading to admission (3). Procedure specific information is currently not available, but ideally should be (1).

A number of centres commented on difficulty obtaining the data. Others reported that a decision is made on the day as to whether a patient can be managed as a day case, potentially influencing the results.

## Conclusions

The rate of routine audit of unplanned admissions in the UK is low. This project will be followed with a prospective audit 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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