South Thames Paediatric Network
Transforming Healthcare for Children and Young People

A Good Practise Case Study- Paediatric Elective Recovery

Paediatric ENT HIT List Framework for Adenotonsillectomies

The Medway Method

With a huge backlog of paediatric adenotonsillectomies to perform, and limited provision of paediatric anaesthetists and day case beds, we concentrated on optimising day case procedures and our existing lists in the week. Prior to developing the High Intensity Treatment (HIT) list framework, Medway NHS Foundation trust were only managing to perform 3-4 adenotonsillectomy cases in a morning (with afternoon lists reserved for grommet insertions etc without tonsil surgery). Patients were universally observed for four to six hours post op, with a non-standardised mixture of methods of dissection employed.

Since introducing the HIT list framework, Medway NHS Foundation Trust has seen day case adenotonsillectomy procedures increase by 300%. 12 adenotonsillectomy/ tonsillectomy patients are now being operated on in especially scheduled all-day theatre sessions, with a half hour lunch break and with all cases being completed by 4pm to be discharged home at 7pm. 8 patients are admitted at 07:30 (ready for a team brief at 08:15) and 4 patients at 12:30. We have managed this increase with minimal extra staff requirements (detail later), the framework uses only 1 Consultant Anaesthetist, with a trainee, and in just one theatre.

Application of the following GIRFT principles and other methodologies made this possible:

Pre-operative

Treat paediatric ENT cases within a day case setting: We converted an entire 8 bedded bay of the Day Case Unit to treat paediatric cases (reducing transfer time from 15-20 minutes to 1 minute) –the children's surgery cases were previously managed in a bay beside the paediatric ward, located one floor above theatres.

Reviewed administrative processes: Retrospective case notes review and prospective identification of well patients with no medical or psychosocial complexity to ensure patients are suitable for a HIT list. Patients were selected that underwent Nurse-led preassessment (low risk by default). Scheduling of only adenotonsillectomy or tonsillectomy to the list.

Re-prioritise cases: Minimum age 3 years old (ASA 1 or 2 e.g. mild asthma), cases performed in age order.

Adopted standard patient information: ENT UK and RCoA information sheets on the procedure/anaesthetic for all patients e.g. 'Dennis has an anaesthetic'. Tour of the day case unit as part of pre assessment process, reducing parental and patient anxiety. Clear pre and post-operative information on expected recovery, with instructions for managing pain and the early signs of complications.

Intraoperative / On day of surgery

Standardisation of kit (coblation) and procedure for all patients. Nominated member of staff holds the "baton" for each task (set up of coblator, positioning of patient, reading WHO checklist etc.) Same task performed by same person for the duration of the list.

Consultant delivered operating and anaesthetic (senior anaesthetic trainee assists turnaround time, ENT trainee assists with documentation and consent/review).

Staffing is optimised: Staffing of the paediatric day case ward –3 trained nurses, one Care Support Worker (CSW), one play specialist (a normal paediatric list has 2 trained nurses, one play, one CSW).

Staffing in theatre – 1 consultant anaesthetist and a trainee, 1 surgeon and a trainee, 2 scrub nurses, 2 ODP's, 2 CSW's (normal day has 2 scrub, one CSW, one ODP). Dedicated paediatric recovery bay for the list.

Each patient receives a standardised anaesthetic (fruit shoot on arrival, Ametop/cannula, iv induction via a standardised 'recipe', intubated and sevoflurane maintenance. We also use post op topical local anaesthetic to the tonsil beds (0.5% chirocaine 2mins on soaked tonsil swab). All patients are intubated with an ETT, rather than using LMAs.

Maintain flow of patients- only one theatre used and no simultaneous anaesthesia (patient can be checked into anaesthetic room (WHO) and cannulated whilst previous patient is being woken up).

Post-operative

Use of pre-printed, *standardised post-op note* with key information (time to begin eating and time of discharge; three hours after wand placed down). Adherence to STPN guidelines for OSA patients, post-op analgesia and follow up. Use of paediatric nurses to observe post op, with provision of ibuprofen (7.5mg/kg) PRN as rescue analgesia if required.

Parents are instructed to give 7 days of weight based analgesia (15mg/kg QDS paracetamol and 7.5mg/kg QDS ibuprofen).

Following the HIT list, we have a cup of tea and biscuits at 4pm to debrief and learn from any challenges presented on the day. Staff morale remains high and the dynamic atmosphere and team effort has persisted over multiple lists.

Patients get a post op next day phone call to see how they are doing, regarding pain management, fluid intake and so on.

This excellent model implemented by the Medway MDT paediatric surgical team provides a template through which other units could develop similar services to help paediatric backlogs. The key step is team working and ensuring that there is engagement from all key stakeholders.

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