

# QUALITY IMPROVEMENT: THINK DRINK!

## OPTIMISING PAEDIATRIC PRE-OPERATIVE FLUID FASTING

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### Introduction

The APAGBI Consensus Statement (2018) recommends that children should be encouraged to have clear fluids up to **one hour** before elective general anaesthesia, unless there is a clear contraindication[1]. A growing body of evidence suggests this leads to less irritability and dehydration, while the risk of gastric aspiration does not increase even if fluids are drunk up to the operation itself[2]. Interventions were implemented in consecutive years at Salisbury District Hospital, a regional cleft centre, and their impact on reducing paediatric pre-operative fluid fasting times were reviewed.

### Methods

Clinical notes of all paediatric cases conducted in 'Main Theatres' in a two-week period in January 2020 were retrospectively reviewed to determine time of last fluid intake and time of arrival in theatre. These were compared to those over the same time period in 2019 and 2018.

### Interventions

In June 2018, posters were displayed emphasising the 6-4-1 hour fasting guidance.

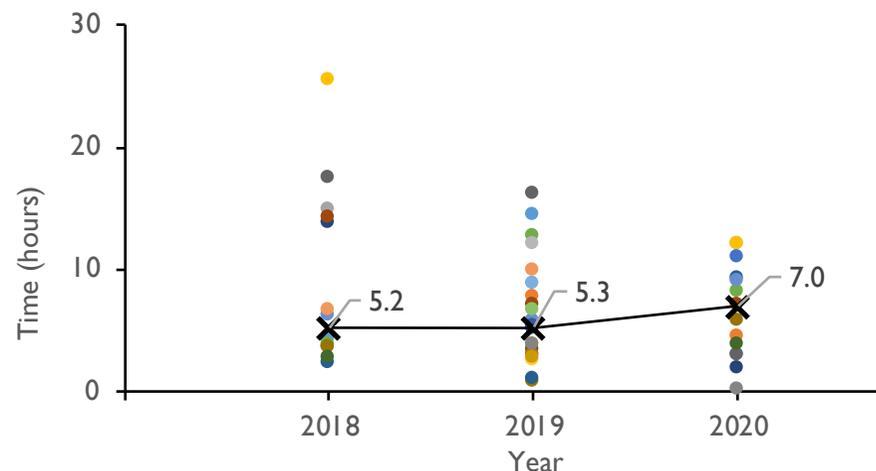
During 2019, fluid fasting guidance was included in the induction programme for incoming junior doctors, and reinforced in teaching to specialist surgical nurses, who were encouraged to educate parents. In addition, the paediatric ward housekeeper was tasked with offering squash to every child on arrival.

### References

1. APAGBI Consensus Statement on updated fluid fasting 30 April 2018 <http://www.apagbi.org.uk>
2. Andersson H, Zaren B, Frykholm P. Low incidence of pulmonary aspiration in children allowed intake of clear fluids until called to the operating suite. Paediatric Anaesthesia 2015; 25 (8) 770-777.

### Results

Figure I. Pre-operative fluid fasting times in paediatric cases



Despite an increase in median fluid fasting time, the range of fluid fasting times has visibly reduced, with fewer children being fasted for longer time periods. Maximum fasted time decreased from 25.3 hours in 2018 to 16.1 hours in 2019, and 12.0 hours in 2020.

### Discussion

The improvement in distribution of fluid fasting times with each year is a positive outcome. Review of patient notes revealed fewer documented cases of patients being told out-of-date fasting guidance, such as 'nil by mouth from midnight'. However, there is still work to be done to move closer to the one hour goal. Our next step is to update the template letter sent to parents of children undergoing elective surgery highlighting the fasting times; further interventions and a subsequent review are planned. Overcoming ingrained preconceptions in staff is challenging; educating and empowering patients and parents to take responsibility may be the next step.