

Over-fasting before surgery can lead to dehydration, irritability, lethargy, nausea, hypoglycaemia, tricky intravenous cannulation and decreased patient satisfaction. Our patient experience of fasting was suboptimal (Figure 1).

### Aims By May 2019:

90% of afternoon patients will have breakfast

90% of day surgery patients will have a fluid fasting time of <2hours

## Method

We conducted a retrospective data analysis of anaesthetic charts & theatre checklists to establish out baseline. In October 2018 we formed a multi-disciplinary Fasting Improvement Team. We studied our system thoroughly using Ishikawa charts, process mapping, bench-marking, user surveys and Pareto charts. The main reason for children not having breakfast was 645am being too early. Fluid fasting times were long due to lack of clarity of instructions, and restricted access to fluids on the Day Surgery Unit. We used these findings and the experience of the wider team, patient & parents to generate change ideas.

## Process Change

- Creating a Hydration Station
- Clearer child-friendly pre-operative leaflets
- Poster campaign and children's poster competition
- Purchase of a freezer and pre-operative ice lollies offered
- Re-writing guidelines to decrease clear fluid fasting from 2h to 1h
- 'I Can Drink Until' cards given to all patients
- Introduction of pre-admission clinic fasting information flyers
- Text-reminder service
- Changing breakfast time from 0645 to 730hrs



Empowering staff & parents to offer drinks to patients



New patient information leaflets designed



'I Can Drink Until' cards

## Achievements

We were proud of the results our team achieved. We believe that this success was due to the multidisciplinary nature of our team, that we all felt comfortable sharing ideas and that we took time to explore our system before trying to change it. We had fun and celebrated small successes.

## Key Learning Points

Change is all about people, about the team. Strength comes from a team which is empowered to make suggestions and have ownership of the project.

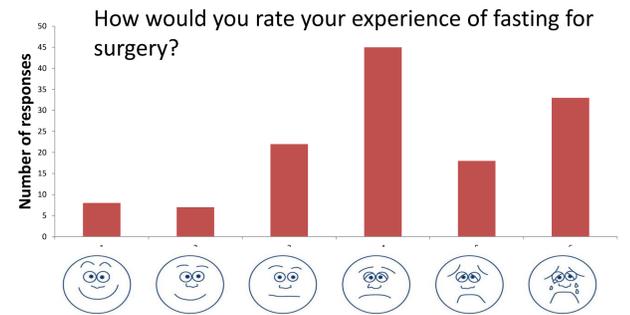


Figure 1: Patient survey of 133 patients attending our Day Surgery Unit (January 2019).

## Results

The mean fluid fasting time decreased from **4h 35 mins** in Aug/Sept 2018 to **2h 15 mins** by April/May 2019. The percentage of afternoon patients having breakfast increased from **55.4%** in Aug/Sept 2018 to **76.3%** in April/May 2018. Figures 2 and 3 illustrate the increase in patients having a drink within 2h of going to theatre, and the lowering and stabilisation of food fasting times.

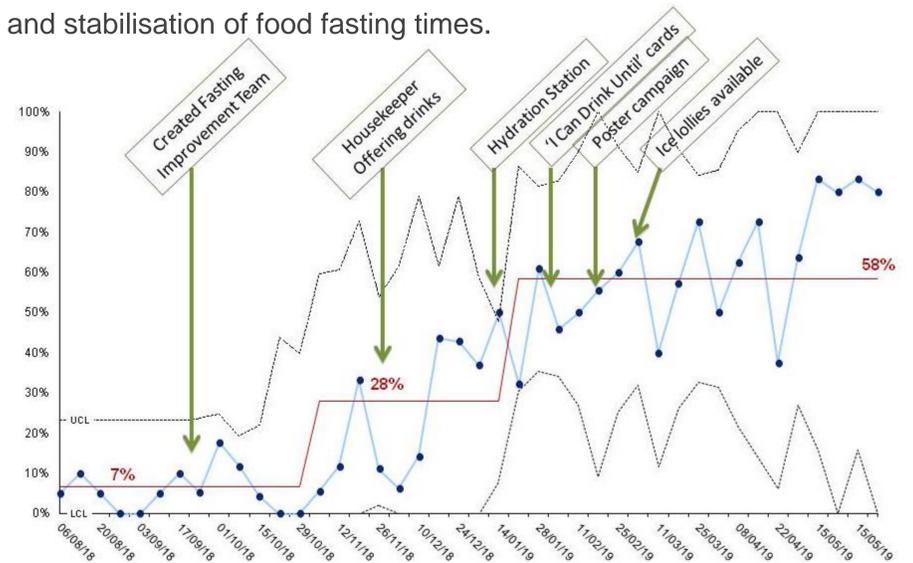


Figure 2: Percentage of patients having a drink less than 2 hours pre-operatively

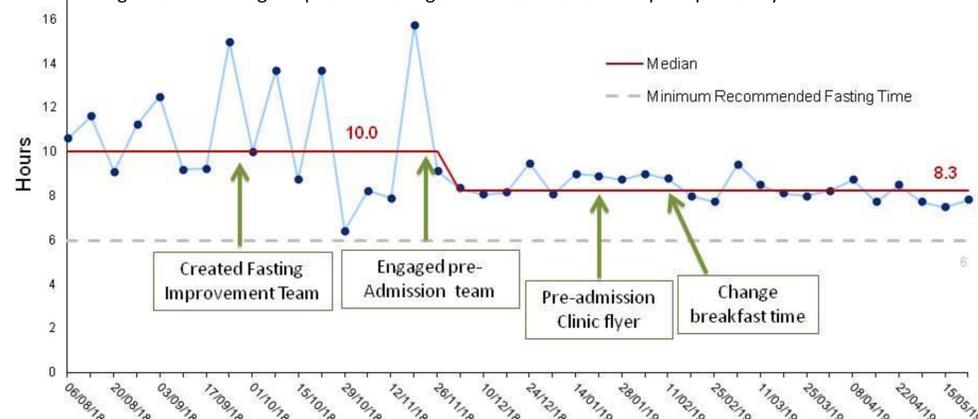


Figure 3: Median weekly food fasting times (h)

## Conclusions

Using a strategy of exploring the system, building a diverse team, creating agency and using novel ways to create engagement lead to improved fluid and food fasting times and sustainable systemic changes.

## Scale / Spread

We are spreading the learning from our Day Surgery project to the wards in the Royal Hospital for Children in Glasgow. We have started to explore the system on Ward 3B and implement some tests of change. The lessons from this project have been invaluable, but we are mindful that different clinical areas work slightly differently and that there is not a 'one size fits all' formula.