

# “Cyclizine’s all that works” – Rationalising anti-emetic administration in gastroenterology

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## Introduction:

Standard practice in our trust was to prescribe three anti-emetics and then administer at nurse discretion (ondansetron, metoclopramide and cyclizine). No guidelines exist to guide this. This led to overuse of IV cyclizine.

1. IV cyclizine costs approximately 30x that of ondansetron and metoclopramide.
2. Cyclizine has been used recreationally and was sought by patients with substance abuse issues, leading to:
  - o Prolonged stays
  - o Unnecessary admissions
  - o Increased costs
  - o Enforcement of behaviour

## Aims:

- Reduce IV cyclizine use by 80% in gastroenterology, by June 2017
- Gain understanding of nursing attitudes and understandings towards anti-emetics
- Rationalise dispensation of anti-emetics through targeted education

## Methods:

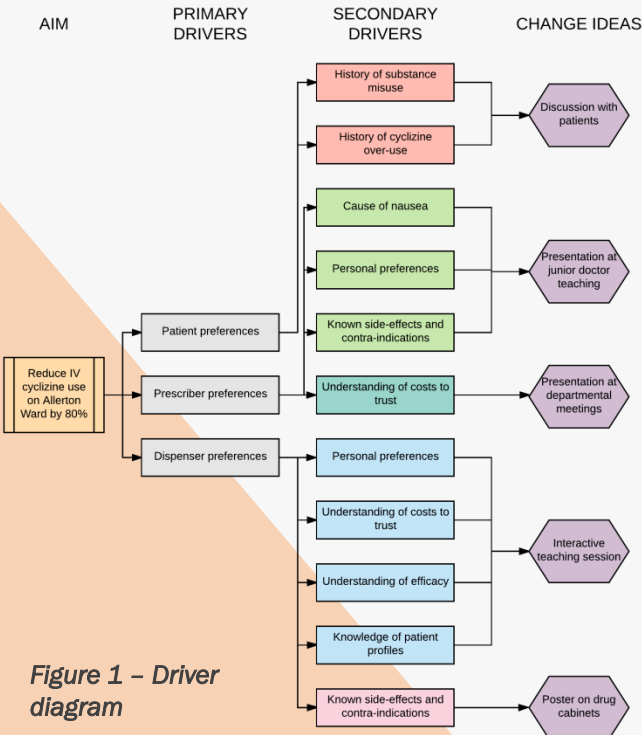


Figure 1 - Driver diagram

Figure 1 shows the driver diagram for this project. Baseline data showed that gastroenterology was the highest user of IV cyclizine, thus this specialty was the target area. A survey was carried out to understand the dispenser’s anti-emetic selection preferences. The following interventions were employed in 3 completed PDSA cycles:

1. Interactive teaching session with dispensers
2. Poster on drug cabinets
3. Cyclizine removed from pre-printed section of drug charts

Regular monitoring of IV cyclizine use was carried out fortnightly throughout the project.

## Results:

Figure 2 - Survey data

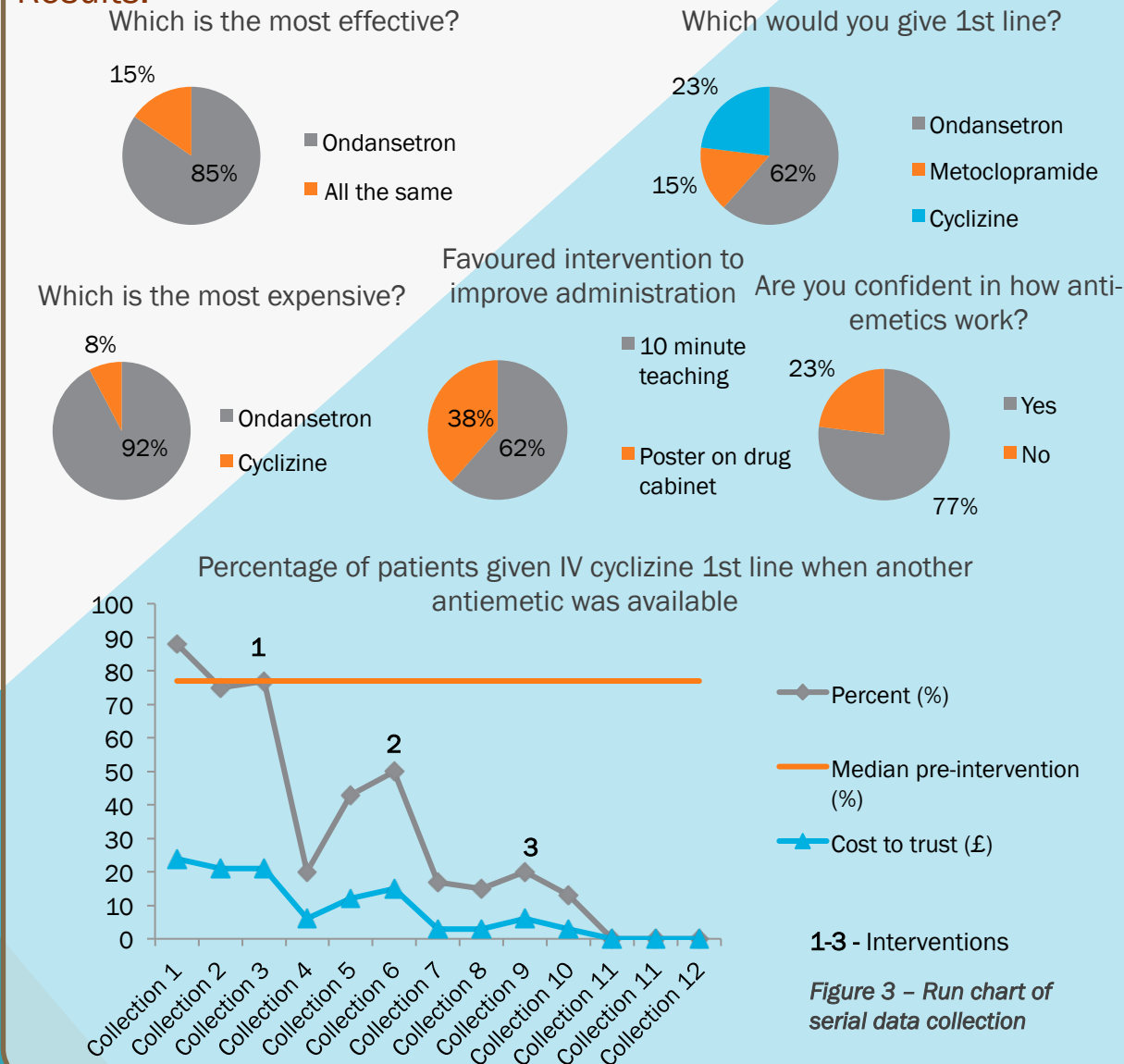


Figure 3 - Run chart of serial data collection

**Future work:** Pharmacy data indicates that the next highest user area of IV cyclizine is anaesthetics, following removal from the pre-printed section of drug charts. This project will be presented at the trust Anaesthetic meeting in November, followed by re-collection of data from pharmacy.

## Conclusions:

The thought process behind dispensation and the action itself appear to differ, evidenced by the discrepancy between what nurses said they would dispense vs. what was actually dispensed (figures 2 & 3).

Successful sustained reduction in IV cyclizine use (Figure 3) with no related incidents reported:

- Immediate reduction in use following teaching intervention however not sustained beyond the time of intervention.
- Sustained change following second and third interventions.

We hypothesise that removal of pre-printed cyclizine from drug charts was successful only because of the powerful behaviour change instilled by the 1<sup>st</sup> two interventions. By involving dispensers early on in the project, and providing rationalisation for the change, there was no backlash. Dispensers did not seek the prescription of cyclizine after intervention 3 as they understood why it was removed.

The approach described in this project has successfully reduced use, whilst simultaneously rationalising dispensation and educating frontline professionals.

Verbal education only appears to only produce short term effects. It is important to plan sustainable, long-term follow-up to interventions to ensure sustained effects.