DRUGGL: Together we learn to improve prescribing practice

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Objectives

- Prescribing errors in paediatrics can inadvertently cause significant harm to children and young people.
- There are a multitude of contributing factors including individualised calculations, medication formulation, and a high turnover of junior doctors who may be unfamiliar with prescribing in paediatrics.
- This QIP aims to increase awareness of common prescribing errors and improve prescribing practice.

Methods

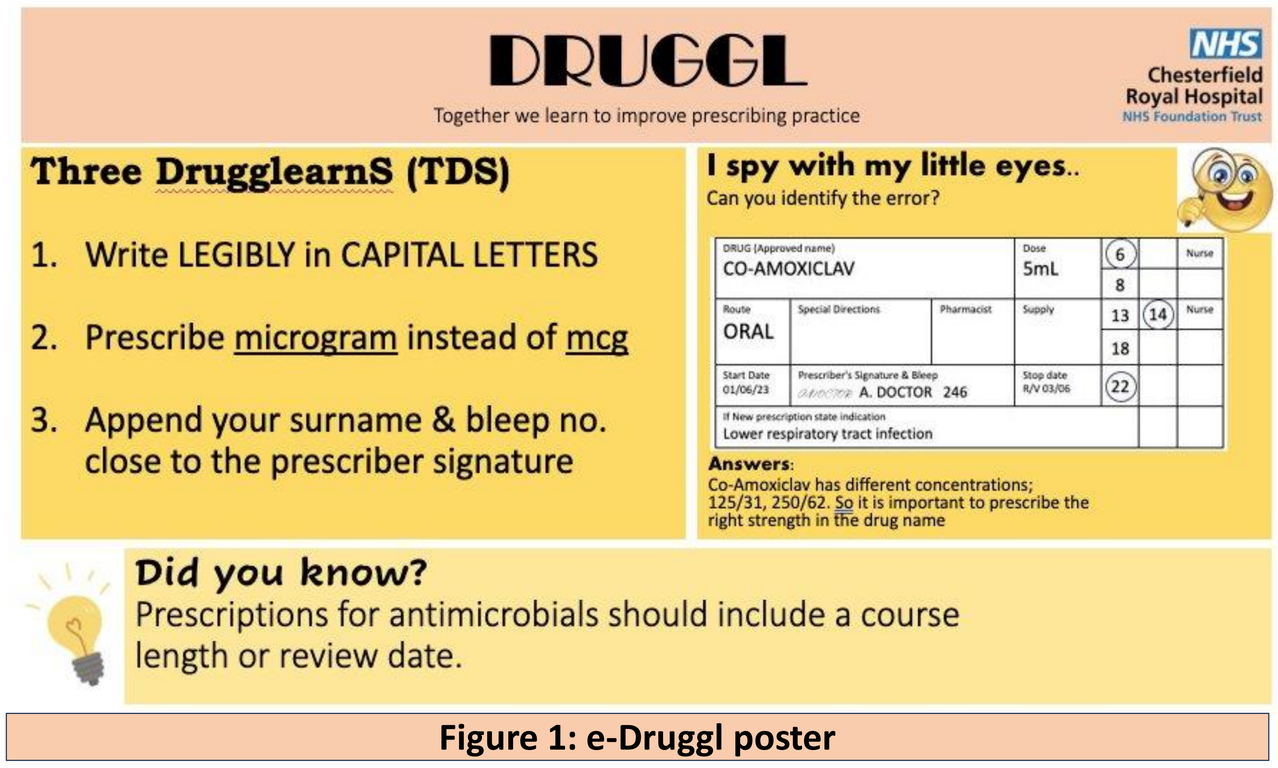


Figure 1: e-Druggl poster

• We collected baseline data from drug charts using a standardised data collection sheet.

• We introduced DRUGGL in May 2023, with a weekly 5-minute drug huddle attended by doctors and nurses, led by a Consultant Paediatrician or Paediatric Registrar.

• An electronic DRUGGL poster (e-DRUGGL) is then circulated to all Paediatric staff members.
(see Figure 1)

• It contains ***three learning points, one drug-related fact,*** and ***a drug error identifying quiz section*** - "I spy with my little eyes".

• We reviewed the drug charts for improvement monthly.

Results

- Review of data showed there was a significant number of mistakes being made suggesting improvement was needed.
- Only 43.75% of drug charts in May 2023 had 100% of the medications prescribed correctly.
- By July 2023 100% of the drug charts reviewed had no prescription errors. (+56.25% improvement)
- Demographic data was correct in most instances with 100% of drug charts having patient name, DOB and weight written in all three months.
- The missing data included Patient number, consultant name and allergy status. (See Chart 1)
- The prescriptions were reviewed with data analysed to find the most common errors. (See Chart 2)

Repeated errors included
- No antibiotic review date (-18.88% from May to July)
- No antibiotic indication (-7.62%)

Improvement included
- Appropriate dose (+6.82%)
- Appropriate units (+20.45%)
- Appropriate route (+4.5%)
- Appropriate frequency (+13.95%)
- Prescriber name and signature (+64.44%)
- Stopped medication signed and dated (+28.57)

Significantly worsened area
- Fluid rate was correctly written in only 50% of the drug charts reviewed in July compared to the 83% of prescriptions in May.

Chart 1: Demographic details

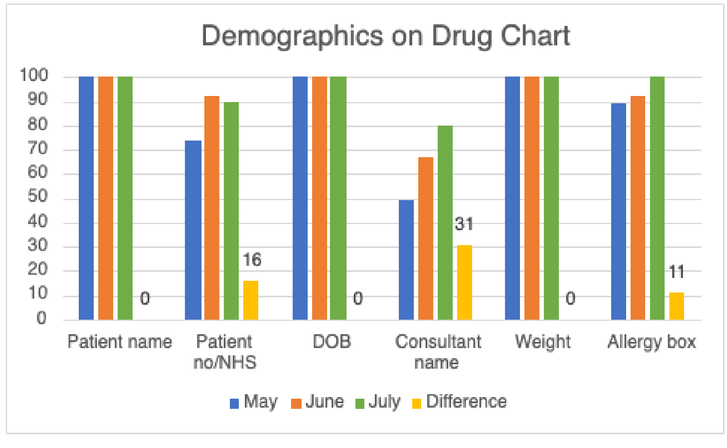
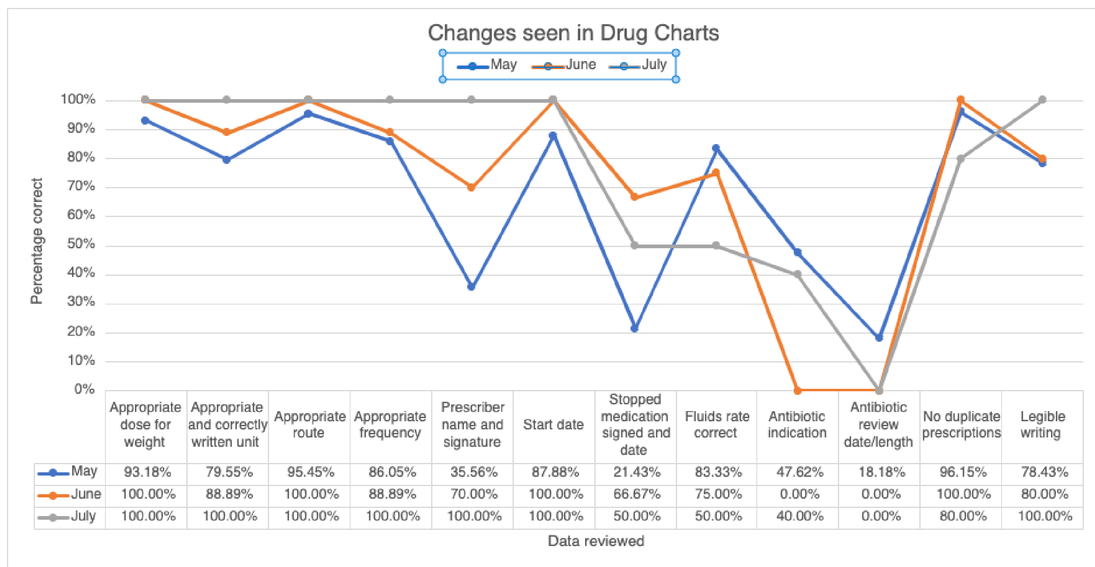


Chart 2: Drug errors across May to July 2023



	Appropriate dose for weight	Appropriate and correctly written unit	Appropriate route	Appropriate frequency	Prescriber name and signature	Start date	Stopped medication signed and date	Fluids rate correct	Antibiotic indication	Antibiotic review date/length	No duplicate prescriptions	Legible writing
May	93.18%	79.55%	95.45%	86.05%	35.56%	87.88%	21.43%	83.33%	47.62%	18.18%	96.15%	78.43%
June	100.00%	88.89%	100.00%	88.89%	70.00%	100.00%	66.67%	75.00%	0.00%	0.00%	100.00%	80.00%
July	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	50.00%	50.00%	40.00%	0.00%	80.00%	100.00%

Conclusion

- An overall improvement was seen following the introduction of the weekly DRUGGL ward rounds.
- This was seen with statistics as discussed, as well as positive feedback received from the paediatric staff including junior doctors and Consultants.
- Having an awareness of the difficulties junior doctors face when rotating in paediatrics; incorporating weekly teaching sessions helped to address common errors and improve overall prescribing practices.
- Commitment as a department to sustaining education around medication related errors is recommended to ensure continued and sustainable improvement in prescribing practice.