IMPROVING PRESCRIBING PRACTICES THROUGH CLINICAN AWARENESS OF MEDICATION COSTS

Dr Rebecca Kuruvilla, Chief Registrar at UHLG and ST7 Clinical Pharmacology and GIM registrar.
With thanks to Dr Oliver Zuzan (Associate medical director) and Dr Dan Komrower (DME) and Dr Peter Ng (AMU acting CD)

INTRODUCTION

Medicines spend forms a large proportion of costs to the NHS with the total medicines bill in England in 2022/23 at £19.2 billion. There is a huge amount of waste within this figure with over £300 million of medicines estimated being unused with half of this amount being recoverable. Polypharmacy causes significant morbidity and mortality to patients. Cost is known to be a good motivator, can it be used to inspire safer and efficient prescribing?

OBJECTIVE

To improve prescribing efficiency by informing prescribers about the cost of medicines and allowing them to make clinical safe cost effective choices. The overarching aim is to improve the value of healthcare that is delivered to patients within the Trust and improve patient safety.

BACKGROUND

A Pubmed search was performed using key terms "cost", "influence" "prescriber behaviour" or "prescibing". Out of 109 articles, **9** relevant were found. Most studies examined the relevance of cost to prescriber behaviour outside the UK and NHS system. **No published studies within the NHS were found trying to influence prescriber behaviour using cost.** One UK literature review found that prescribers were influenced by the support structures such as other colleagues, clinical trial investigators, physician influences and pharmaceutical reps. Interestingly, clinical guidelines and the impact of financial incentives was unclear.

ANALYSIS

My Trust supported me to do a data analyst qualification and second stage of this project was understanding the prescribing data within my Trust in more depth so that I could formulate the areas to target within the intervention. I worked with the pharmacy team to obtain prescribing data across the Trust from 2024-25. I analysed this data using Power BI and created the below visualisations. This analysis helped me to understand areas to target eg. DOACs given there was a large amount of variation. Following analysis areas to target identified were **DOACs, IV Paracetamol, IV Iron and PPI prescriptions.** It was found that the Trust had spent around **£140,000** on IV iron over the past year; a huge area for potential cost saving.


Distribution of spend for DOAC's from January 2024 to January 2025 at RLH
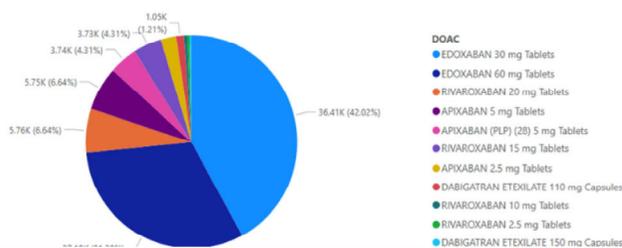
Total spend for Paracetamol at RLH from Jan 24 to Jan 25
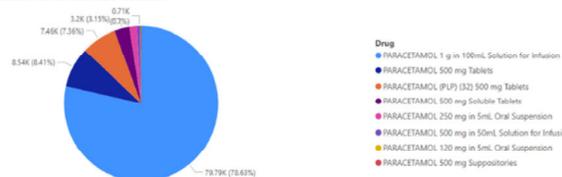
A questionnaire was circulated to Trust resident doctors to understand their views on whether being more aware of the cost of medicines would help them to make more informed prescribing choices. **54** responses were obtained from a range of resident doctor - foundation, core trainee, higher speciality registrar and LAS groups who were accessed via teaching. This identified a gap in the knowledge base and general acceptability for the concept.
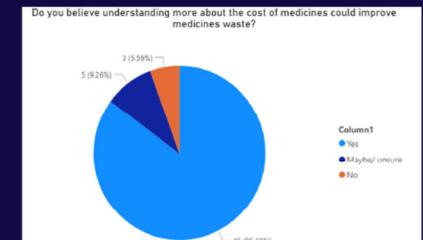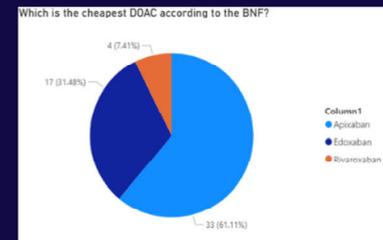
NEXT STEPS

The next stage of the project is to implement an education intervention to educate prescribers on the AMU about the cost of medicines and cheapest clinically equivalent therapeutic options. Areas of intervention are **DOACs, IV and PO Paracetamol, IV and PO Iron and PPI's**. Trends of prescribing practice will be observed for a period of four to six weeks. If positive measures are identified in terms of cost and more efficient prescribing, the next stage will be to integrate cost of these medicines into the electronic prescribing system.

CONCLUSION

This project is a novel idea to upskill prescribers in my Trust on the cost of medicines and use this to inspire better prescribing practices. The overall aim is to integrate this information into EPR and automate this decision making to make prescribing easier for clinicians and safer for patients.