

RISK MINIMISATION STRATEGIES THROUGH DRUG UTILISATION REVIEW

Ana Lou Grace Manluyang, Maresca Attard-Pizzuto, Lilian M. Azzopardi

Department of Pharmacy, Faculty of Medicine and Surgery, University of Malta, Msida, Malta

email: ana.manluyang.19@um.edu.mt

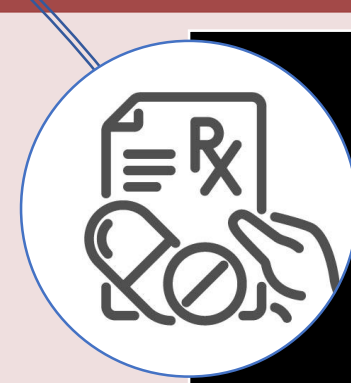
INTRODUCTION

The national pharmaceutical service in Malta provides free medicines and medical devices to outpatients through 219 private community pharmacies.¹ Approval of free entitlement to medicines through the national service provider prioritises meeting pharmacy administrative processes. Development of clinical services during the entitlement review will benefit patients, ensuring treatment continuity across the healthcare system.

AIMS

To characterise the process of pharmacists' review at the national pharmaceutical service entitlement unit and include a risk-minimization strategy through a pharmacist-led drug utilisation review (DUR).

METHOD



Focus group discussion to understand the advantages, barriers, and prioritization of the DUR.



Drug risk minimisation tool development and validation.



Drug Utilisation Review using the developed tool on 150 medication records of older people with 10 entitled medications to manage multiple conditions.



Risk assessment on 10 selected patient cases with cardiovascular disease who had the top 3 DRPs with an intervention at prescriber level was assessed by a risk review expert panel.

RESULTS

- One hundred and fifty patients with multiple diseases managed by different healthcare providers and entitled to at least 10 drugs were identified for prioritisation in the DUR process established through the focus group discussion.
- From the DUR exercise, 84% of patients (n=126) had 10–15 entitled medications, with aspirin n=100 (67%), amlodipine n=92 (61%), omeprazole n=87 (58%), metformin n=82 (55%), bumetanide n=77 (52%), and perindopril n=70 (47%) as the most frequently prescribed medications.
- Hypertension (81%), diabetes mellitus type 2 (58%), and ischaemic heart disease (53%) were the top medical conditions identified.
- Among the 1,088 DRPs identified, 34% were potential drug interactions, 21% were increased risk of adverse drug reactions, and 20% were potentially unnecessary drug therapies.

The data in Table 1 shows the risk assessment of the ten selected patient cases from the risk review panel.

Table 1. Prospective Risk Assessment of DRPs (N=30)

Drug-Related Problem	n	Median Risk
Potentially Unnecessary Drug Therapy	1	3
Risk for Adverse Drug Reaction	8	3-5
Potential Interaction Between Drugs	21	3-5

1 Very Low; 2 Low; 3 Moderate; 4 High; 5 Very High

CONCLUSION

The developed DUR tool provides for a systematic patient-centered pharmacist intervention during the national pharmaceutical service formulary-based entitlement appraisal to evaluate DRPs in chronic medication entitlement. This is of particular significance when considering that chronic medications are prescribed by different medical specialists and the impact on risk of DRPs from different prescriptions may not be fully evaluated by the individual prescriber.

Acknowledgement

Pharmacy Of Your Choice (POYC) unit

REFERENCE

¹ Government of Malta. Pharmacy of Your Choice About Us [Internet]. Malta: Ministry of Health; 2020 [cited 2022 Aug 10]. Available from URL: <https://deputyprimeminister.gov.mt/en/poyc/Pages/About%20Us.aspx>