

# Introduction of Structured AMS Interventions by Clinical Pharmacists at an Irish teaching hospital

Clinical Pharmacist team<sup>1</sup>, Mary Kelly<sup>1</sup>, Róisín O' Connor<sup>1</sup>, Maeve Colleran<sup>1</sup>, Bernard Carr<sup>1</sup>, Gail Melanophy<sup>1</sup>, Prof Breida Boyle<sup>1</sup>, Prof Colm Bergin<sup>1</sup>, Dr Concepta Merry<sup>1</sup>.

## Introduction

The threat of antimicrobial resistance is a global public health concern. Clinical pharmacists in acute healthcare settings have the expertise in medicines leadership to propose interventions and advise on effective antimicrobial therapy 1,2.

### **Methods**

Two training sessions were carried out in June 2019 with the clinical pharmacists at St James's Hospital (SJH). A set of AMS intervention notes were given to the pharmacists, focusing on, duration of treatment, switching from IV to oral therapy and review/cessation of surgical prophylaxis. These notes could be saved on the e-prescribing system , including electronic Patient record and adjusted for the individual patient.

The notes referenced parameters such as duration, C-reactive protein (CRP), white cell count (WCC), temperature and percentage bioavailability of certain antimicrobial agents. Pharmacists were encouraged to use these notes when querying antimicrobials for patients on their wards with the medical/surgical teams.

Pharmacists were asked to log their interventions for the AMS team. The AMS team followed these interventions and if the advice was followed within 24 hours, the intervention was classed as "Accepted".

#### References

1. Garau J, Bassetti M. Role of pharmacists in antimicrobial stewardship programmes. International journal of clinical pharmacy. 2018 Oct;40(5):948-52. 2. Wickens HJ, Farrell S, Ashiru-Oredope DA, Jacklin A, Holmes A, Antimicrobial Stewardship Group of the Department of Health Advisory Committee on Antimicrobial Resistance and Health Care Associated Infections (ASG-ARHAI), Cooke J, Sharland M, Ashiru-Oredope D, McNulty C, Dryden M. The increasing role of pharmacists in antimicrobial stewardship in English hospitals. Journal of Antimicrobial Chemotherapy. 2013 Nov 1;68(11):2675-81.

<sup>1</sup>St James's Hospital, Dublin.

#### **Data Analysis Results** There were 1346 interventions made by clinical pharmacists over 100 weeks [See Figure A]. The majority of the interventions (1117, 83%) were in the medical and surgical directorates. types [See Figure B] (C) **Types of pharmacist antimicrobial (**A) interventions Other 82 Therapeutic Choice Therapeutic Choice 89 PO/IV PO/IV 186 **Dosing Recommendations** Dosing Recommendations 280 Discontinue 709 Discontinue Accepted 200 300 400 500 600 700 800 0 100 Not Accepted B **Directorate of primary team** Conclusion 7.00% 12% 41% 42% Medicine Surgery Med El HOPE team.



The most common intervention type was consideration to "Discontinue" antimicrobial therapy, with an acceptance rate of 72% [See Figure C]. Uptake of recommendations was > 60 % for all intervention types [See Figure C]



Uptake of AMS interventions from clinical pharmacists is high. This demonstrates the opportunity pharmacists have to act as AMS champions in their areas. The number of interventions from the haematology/oncology (HOPe) directorate was lower; the HOPe pharmacy team make interventions at the multi-disciplinary meetings (MDTs), the structural interventions were less appropriate. The total number of interventions may be underrepresented due to the requirement to log the intervention for the AMS

Department of Pharmacy, St James's Hospital Dublin 8
Róisín O'Connor & Mary Kelly, AMS pharmacists
roconnor@stjames.ie