New General Drug Chart
Post-Implementation Clinical Audit

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1 INTRODUCTION

A new general drug chart was introduced at the Mater Misericordiae University Hospital (MMUH) in May 2019. The drug chart was developed in response to in-house reported medication incidents, and in-line with national medication record templates. The new general drug chart has a new configuration and prescribing format. Changes include dedicated sections for anticoagulants and antimicrobials and a Venous Thromboembolism & Bleeding Risk Assessment (VTE-RA) Tool, that was previously available on the hospital intranet.

2 AIMS & OBJECTIVES

- To assess use of the new general drug chart against set standards, including appropriate use of the dedicated sections for anticoagulant and antimicrobial prescribing.

3 METHODS

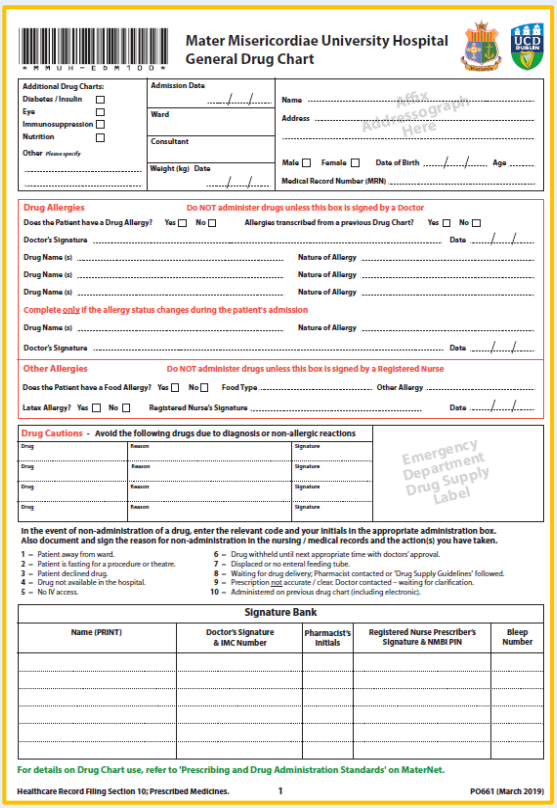
- A data collection form was designed using the MMUH 'Prescribing and Drug Administration Standards'. This document describes how prescribers and nursing staff are to use the drug chart. Guidelines include where to prescribe specific medication and general best practice guidelines.
- Data was collected by nurse and pharmacist volunteers over a two week period in September 2019, 4 months post-implementation.
- Completion of all sections of the general drug chart were reviewed, including completion of the allergy sections, and the VTE-RA tool.
- A target sample size of approximately 275 patients was chosen as this equates to approximately half of all hospital in-patients. A convenience sample was collected.
- Data collectors were assigned to collect data on specific wards until the target sample number was reached. Anonymised data was analysed by pharmacy staff using Microsoft Excel. Descriptive statistics were calculated.

4 RESULTS

- 273 drug charts were reviewed across 23 in-patient wards.
- An average of 16 medicines were prescribed per patient (range: 1-41).
- Completion rates for specific drug chart sections are detailed in Table 1.
- 75% (n = 204) of patients were prescribed an anticoagulant, however, only 3% (n = 8) of patients had the VTE-RA tool completed by the medical team.
- The majority of anticoagulant (99.5%) and antimicrobial (95%) prescriptions were written in the correct section.
- Of the 26 patients prescribed Surgical Antimicrobial Prophylaxis (SAP), only 42% (n = 11) of patients had it prescribed in the new dedicated SAP section of the drug chart.
- For patients prescribed an antimicrobial requiring therapeutic drug monitoring (TDM), the correct section was used in all cases.
- Completion of target and attained levels was documented for 38% and 35% of patients on TDM antimicrobials respectively.
- Documentation of 'proposed duration' and 'clinical indication' for antimicrobials was 25% and 50% respectively.

Table 1: Completion of Drug Chart Results by Section

Section / Detail of General Drug Chart	Rate of Completion
'Drug allergy' completed by a doctor	**93% (n = 254)**
'Other allergy' completed by a nurse (e.g. food and / or latex)	**89% (n = 243)**
Physician Irish Medical Council (IMC) Number	**61% of prescriptions (n = 2,678)**
VTE-RA Tool	**3% (n = 8)**


Mater Misericordiae University Hospital
General Drug Chart

Additional Drug Charts: Diabetes / Insulin, Eye, Immunosuppression, Nutrition, Other (Please specify)
Admission Data, Ward, Consultant, Weight (kg) Data
Name, Address, Male, Female, Date of Birth, Age, Medical Record Number (MRN)
Affix Addressograph Here

Drug Allergies — Do NOT administer drugs unless this box is signed by a Doctor
Does the Patient have a Drug Allergy? Yes No — Allergies transcribed from a previous Drug Chart? Yes No
Doctor's Signature, Date
Drug Name (s), Nature of Allergy
Complete only if the allergy status changes during the patient's admission

Other Allergies — Do NOT administer drugs unless this box is signed by a Registered Nurse
Does the Patient have a Food Allergy? Yes No, Food Type, Other Allergy
Latex Allergy? Yes No, Registered Nurse's Signature, Date

Drug Cautions - Avoid the following drugs due to diagnosis or non-allergic reactions
Drug, Reason, Signature
Emergency Department Drug Supply Label

In the event of non-administration of a drug, enter the relevant code and your initials in the appropriate administration box. Also document and sign the reason for non-administration in the nursing / medical records and the action(s) you have taken.
1 – Patient away from ward.
2 – Patient is fasting for a procedure or theatre.
3 – Patient declined drug.
4 – Drug not available in the hospital.
5 – No IV access.
6 – Drug withheld until next appropriate time with doctors' approval.
7 – Displaced or no enteral feeding tube.
8 – Waiting for drug delivery. Pharmacist contacted or 'Drug Supply Guidelines' followed.
9 – Prescription not accurate / clear. Doctor contacted – waiting for clarification.
10 – Administered on previous drug chart (including electronic).

Signature Bank
Name (PRINT), Doctor's Signature & IMC Number, Pharmacist's Initials, Registered Nurse Prescriber's Signature & NMBI PIN, Bleep Number

For details on Drug Chart use, refer to 'Prescribing and Drug Administration Standards' on MaterNet.
Healthcare Record Filing Section 10; Prescribed Medicines. 1 PO661 (March 2019)

Figure 1: Page 1 of New General Drug Chart

5 CONCLUSION

In most instances, the new general drug chart is being used by nursing and medical staff in line with hospital standards.

Topics that could be targeted for prescriber and nurse education include, correct use of the SAP section, documentation of target / attained levels of TDM antimicrobials and specifying 'proposed duration' and 'clinical indication' for antimicrobials. Inclusion of the prescribers' Irish Medical Council number on all prescriptions also needs to be addressed.

Although a large number of patients were prescribed anticoagulation, low VTE-RA tool completion rates suggest that this new method of documentation has not been fully adapted into practice. Further research on the appropriate completion of the VTE-RA tool and prescribing of VTE prophylaxis is currently being conducted in-house by a VTE Quality Improvement Group.

DISCLOSURE:
1. Ms Dearbhla Murphy – nothing to disclose
2. Ms Karolina Holacka – nothing to disclose
3. Ms Jennifer Brown – nothing to disclose