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STANDARDIZED DOCUMENTATION RECOMMENDATIONS FOR DRUG CHART, TEST DOSE AND VERBAL ORDERS - IMPLEMENTATION IN HOSPITAL SETTING WILL HELP REDUCE MEDICATIONS ERRORS

Introduction

Several reports have documented medication errors and its consequences[1]. Though there are many different approaches for reducing errors[2], following recommendations made by Pharm D interns from their first-hand experience doing ward rounds in Indian hospitals would have a positive impact on reducing medication errors. The prototypes mentioned in this article were implemented by PharmD interns in a multi-specialty hospital at Hyderabad, Telangana.

Weekly drug order chart

Daily drug chart, where the nurses and duty doctors copy the same drugs again and again daily in different sheets has been a long standing practice in most of the Indian hospitals. This practice has great disadvantage since transcribing and translational errors occurs frequently when nurses carry out such tedious process even when this step is carried out in presence of medical residents. Since all drugs written in consultant's notes are transcribed to the medication chart, too many instructions make it difficult for the nurses to identify the changes made (e.g. change in frequency, change in dose). The authorization for the drug, i.e. sign and stamp near the drugs were also not found in the drug chart, which makes it difficult for health care provider to identify which physician prescribed that particular drug.

A weekly drug chart as shown in Figure.1 was prepared with drug details on one side and administration details on the other . Drug details include their name (in capital letters), dose, frequency, route of administration along with the corresponding prescriber's signature and stamp with date. This proposed drug chart will have space for nearly six days and any changes made will be apparent. This drug chart can help nurses in overcoming writing burden, help physicians in identifying the name of particular prescriber, if multiple physicians are involved in a case and also in avoiding polypharmacy.

Drug Name (IN CAPITAL LETTER)			Date :			Date :			Date :			Date :			Date :		
			Time	Nurse 1	Nurse 2	Time	Nurse 1	Nurse 2	Time	Nurse 1	Nurse 2	Time	Nurse 1	Nurse 2	Time	Nurse 1	Nurse 2
Dose	Frequency	Route															
		BF | AF															
Doctor's Signature, Date & Time																	
Drug Name (IN CAPITAL LETTER)			Date :			Date :			Date :			Date :			Date :		
			Time	Nurse 1	Nurse 2	Time	Nurse 1	Nurse 2	Time	Nurse 1	Nurse 2	Time	Nurse 1	Nurse 2	Time	Nurse 1	Nurse 2
Dose	Frequency	Route															
		BF | AF															
Doctor's Signature, Date & Time																	
Drug Name (IN CAPITAL LETTER)			Date :			Date :			Date :			Date :			Date :		
			Time	Nurse 1	Nurse 2	Time	Nurse 1	Nurse 2	Time	Nurse 1	Nurse 2	Time	Nurse 1	Nurse 2	Time	Nurse 1	Nurse 2
Dose	Frequency	Route															
		BF | AF															
Doctor's Signature, Date & Time																	
Drug Name (IN CAPITAL LETTER)			Date :			Date :			Date :			Date :			Date :		
			Time	Nurse 1	Nurse 2	Time	Nurse 1	Nurse 2	Time	Nurse 1	Nurse 2	Time	Nurse 1	Nurse 2	Time	Nurse 1	Nurse 2
Dose	Frequency	Route															
		BF | AF															
Doctor's Signature, Date & Time																	

Figure 1: Prototype of Drug order chart

Weekly drug chart with a two step-verification by nurses/doctors for high risk drugs can be a solution for the problems faced due to daily drug chart. These weekly chart can reduce the writing works and thereby reducing translational errors, since printed prescriptions are only for Out-patients in most of the hospital and not for In-patients.

Test Dose Chart

Antibiotic test doses can help in identifying patient's allergy status for a particular drug. It is well known that administration of wrong drugs can lead to severe anaphylactic reactions and even death. Test dose given are documented by the nurses only when reaction occurs. These are reported in nursing notes which physicians may overlook due to the complexity of an In-patient case sheet and any other physician involved in the case may not know the allergic status of the patient.
A separate test dose chart was prepared by PharmD interns as shown in Figure. 2 where all the necessary data regarding the test drug and the patient's reaction towards it are documented. It is also advised that once patient is proven with allergy, the same should be mentioned in all the drug chart.

TEST DOSE							
Date	Time	Drug Name	Test Dose given by	Report: Positive/ Negative	Reading time	Result read by	Signature

Figure 2: Prototype of Test Dose chart

Designing and implementing a test dose chart is a very simple and effective strategy to record, retrieve and represent the data on allergic status to a physician therefore preventing adverse events that could occur due to wrong drug administration. The convenience and feasibility of Test dose chart can be assessed by physicians and shall be implemented after necessary modifications. There is almost no downside in using this test dose chart

Verbal Order Chart

Generally, verbal orders that involves drug administration are given by physicians in case of emergency, when there is not sufficient time to write down manually in the prescription or through a telephone communication. When such orders are given, nurses tend to directly enter the same in drug chart. In the event of an prescription auditing or a drug related problem, the authorization of drug order becomes questionable to the physician.
To overcome such problems, a verbal order chart was prepared as shown in Figure. 3 where the all the verbal orders are entered by nurses and are authorized by the physicians within 24 hours from the order. This can make aware of the physician about the accuracy of the order followed.

VERBAL ORDER								
S.No	Time & Date	Drug Name	Dose	Route	Ordered by	Given by		Dr's signature (within 24 hours)
						Nurse 1	Nurse 2	
Remarks :								

Figure 3: Prototype of Verbal order sheet

We are sharing this information so other hospitals in India or other developing countries that do not have formalized well planned documentation policies can use above charts to decrease medication errors in their setting.

Verbal order sheet is one of the best ways for the nurses to authorize the drug orders given by physicians and transcribe the same data in the drug chart. The convenience and feasibility of verbal order sheet can be assessed by physicians and nurses and can be implemented in all the IP wards.

References

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