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Process Improvement with Use of Electronic Transfusion Slip

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Introduction

Recipient blood card is used to tag with every unit of blood and/or blood product issued to the patient for transfusion.

Before issuing a unit of blood product to a patient, Medical Technologist (MT) transcribes the patient's particulars on the front of the recipient card.

Upon collection of the blood product, doctors and nurses verifies the patient's identity and check the blood product unit against the card.

After transfusion, nurses transcribes the patient's particular and transfusion timings on the back of the card.

Changing to an electronic approach will enable patient's particulars to be automatically populated into the necessary fields therefore no manual transcription is involved.

Methodology

The layout of the electronic slips is customised according to user requirements and feedbacks obtained from laboratory staff, doctors and nurses.

A training guide was given to the Assistant Deputy of Nursing and Chairman of Hospital Transfusion Committee to use as teaching material for their staff.

Results

Figure 1

FRONT

HSA
Please fill in reverse side and return to the Transfusion Laboratory

Recipient

Hospital _____
Ward _____
Name _____
Reg No _____
Race _____
Age _____ Sex _____
Date Taken _____
Unit No _____
Not to be used after _____

Compatible with

Name _____
Group _____ Reg No _____
Hospital _____ Ward _____
Blood Checked By
1. _____
2. _____

BEFORE

BACK

Date of Transfusion _____
Time start _____ end _____
Amount given _____
Given by _____
Reaction (if any) _____

AFTER

Figure 1: Recipient blood card provided by Blood Services Group

- Area shaded in **YELLOW** - manually transcribed by MT
- Area shaded in **red & grey** - manually transcribed by doctors and nurses

Figure 2: New electronic transfusion slip

- Areas shaded in **YELLOW & red** from previous card are carried over to the newly revamped electronic slip.
- Patient's particulars are now automatically populated from Blood Bank database
- Enhanced features which provides more information to users are included to the slip (shaded in **blue**)

Figure 2

This unit is compatible with:
Patient: **D/O NTESTING NBS5**

MRN: **S1234567A**
Sex: Female
DOB: 01/10/2013
Location: CCC

Product Unit No: S270114 000001 A
Product Type: RBC SAGM
Expiration Date/ Time: 29/03/2014 23:59
Volume (mL): 200mL
Unit Attribute: E neg, c neg

Patient's ABO / Rh(D) Blood Group: UNKNOWN
Patient's red cell antibodies: Anti-E, Anti-c
@ Patient may have clinically significant alloantibodies detected in the plasma. Please send 18 ml of plain blood, 3ml EDTA blood and 7 patient labels for antibody identification on his/her next visit / admission.

Donor's ABO / Rh(D) Blood Group: O POS
Crossmatch Results: UNMATCHED
Date/ Time of Product Issued: 28/03/2014 17:26
Medical Technologist: KAHHML

THIS AREA IS TO BE COMPLETED FOR TRANSFUSION

CHECK the following for Correct Patient Identification AT BEDSIDE:

- Ask Patient for His/ Her NAME & MRN (if applicable)
- Check Patient's Name & MRN On Wristband Against Transfusion Slip
- Check Patient's Blood Group against Blood Group of Product
- Check Product Number on Blood Bag and Transfusion Slip
- Check Expiry Date of Product

Verification 1: Name _____ Signature _____
Date _____ (dd/mm/yyyy)

Verification 2: Name _____ Signature _____
Date _____ (dd/mm/yyyy)

Begin infusion within 30 minutes of product issued. Otherwise please return back to KKH Blood Bank promptly.

Start Infusion: Date _____ Time _____
(dd/mm/yyyy) (hh:mm)
Location _____ Name _____ Signature _____

End Infusion: Date _____ Time _____
(dd/mm/yyyy) (hh:mm)
Location _____ Name _____ Signature _____

Volume Transfused: _____ mL

Reaction: *Stop Transfusion
No *Yes
Call Blood Bank – ext 1376
Fill up haemovigilance form and send it to Blood Bank

Please return this completed slip to KKH Blood Bank together with the transfused unit.

This transfusion slip is electronically generated from the Laboratory Information System

Conclusion

With the successful implementation of electronic transfusion slips, both MT and nurses can now save time and prevent any transcription errors.