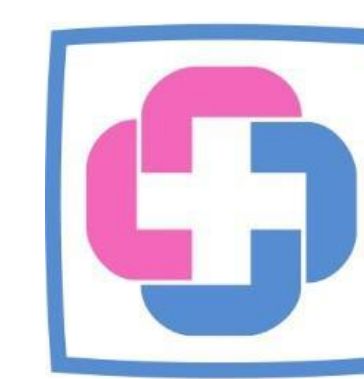




Prevention of Blood Wastage in the Operating Theatre



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Aim

There are many factors leading to wastage of blood and blood products in the Operating Theatre. One of the common factor is blood product out from cold chain for more than 30 minutes. The aim of this project is to identify the root cause of the blood product wastage in the Operating Theatre and subsequently develop intervention to achieve zero wastage within the year.

Methodology

A retrospective study was conducted to retrieve data from laboratory blood banking information system on usage and wastage of blood and blood products from 2014 to 2016 in the hospital. The data showed a total of 12 units of blood being wasted. The reason of wastage was Red Blood Cell (RBC) units are out from controlled temperature storage for more than 30 minutes. The doctor and nurse loses track of time on the blood products thus leading to wastage.

Retrospective Data	RBC	FFP	Pooled platelet	CSP	APP	Prepooled cryopt	Total wastages
2014	3	1	0	0	0	0	4
2015	2	1	0	1	2	2	8
2016	4	1	1	0	0	0	6

Multiple interventions were suggested:

- Writing of time due on blood box
- Visual card reminders

The above suggestions were not ideal as the team were focusing on other critical task and overlooked on the time due. Final intervention was installing a **countdown timer with an alarm to the blood box**. The alarm was set to trigger after **20 minutes**. Upon hearing the alarm, the nurse then reminds the doctor to use or returned the unused blood products to the blood fridge. This intervention was easy to implement, widely acceptable and most importantly reminds the team on the due time of the precious resources



Result

There was no wastage after the implementation of the countdown timer with alarm.

Conclusion

Relatively inexpensive interventions can have a prompt and positive impact on reducing blood wastage with regard to both cost and resource savings. The intervention of installing a countdown timer to the blood box act as an audible reminder for the team helps in preventing wastage.