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SELECTION OF OPPORTUNITIES FOR IMPROVEMENT

Introduction

- The availability of safe, sufficient and timely blood supply for patient care is a key component of Transfusion Medicine Service
- 70-80% blood collection in Malaysia contributed by blood donation drives, emphasizing the needs of meeting targets for adequate patient blood supply
- Blood stock sustainability is an ongoing challenge due to growing population and increasing demand. Health facilities also encounter fluctuating blood supplies, notably during seasonal variations, such as festive periods, monsoon seasons, and Ramadan

Selection of Opportunities

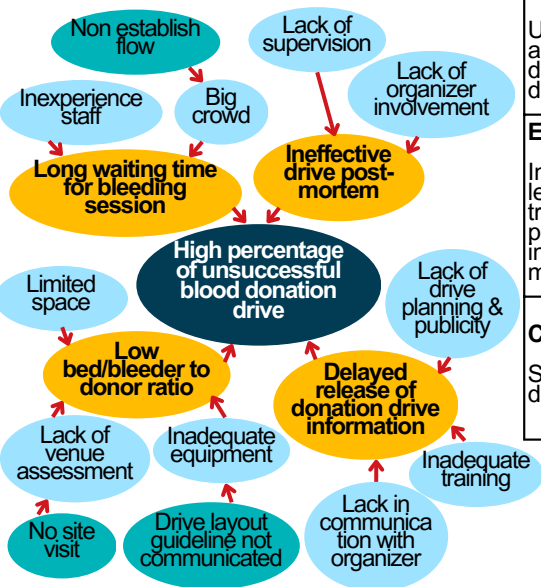
Problem	S	M	A	R	T	Total
High percentage of unsuccessful blood donation drive	19	20	16	17	23	85
High percentage of rejected samples from clinical wards	9	15	10	14	12	60
High percentage of anemia among regular donor	11	13	9	9	10	51

Problem Selection Criteria

- S** Low blood stock may cause delays in medical treatments, jeopardizing patient safety resulting in increased morbidity and mortality
- M** Data collection via Blood Bank Information System version 2.0 (BBISv2) & questionnaire
- A** To ensure sufficient and timely blood supply, improving patient safety, cost effectiveness and quality of life
- R** Improvement can be done without additional cost
- T** The study can be completed within a short period of time

KEY MEASURE FOR IMPROVEMENT

Problem Analysis Chart



Problem statement

Problem:
Unable to maintain blood and component safe level due to unsuccessful blood donation drive

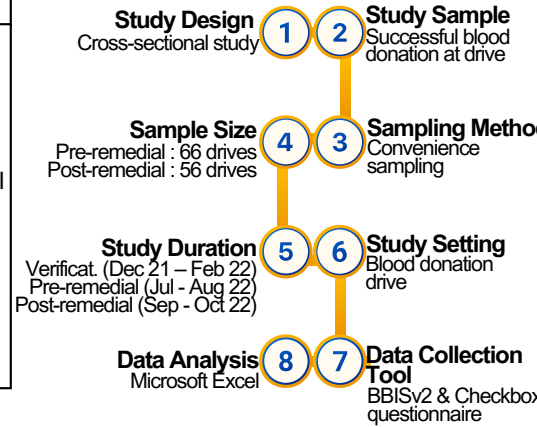
Effect:
Insufficient blood stock may lead to delay in medical treatments, jeopardizing patient safety and potentially increasing morbidity and mortality

Contributing Factor:
Shortcomings in the donation drive planning

Objectives

- General:**
To improve percentage of successful blood donation drive
- Specific:**
- To determine the percentage of successful blood donation drive
 - To identify factors contributing to unsuccessful blood donation drive
 - To formulate strategies and implement possible remedial actions
 - To evaluate the effectiveness of remedial actions implemented

PROCESS OF GATHERING INFORMATION

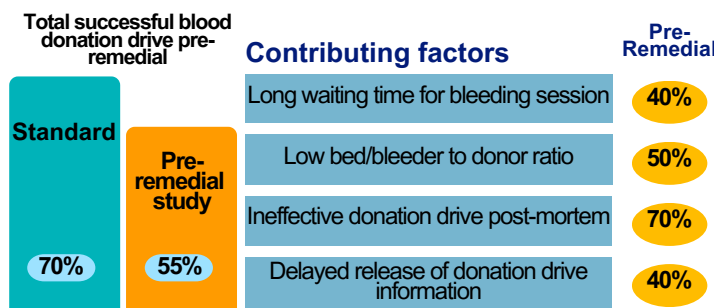


Indicator

$$\frac{\text{Total number of successful blood donation drive}}{\text{Total number of blood donation drive}} \times 100\%$$

Standard > 70%
*Department consensus

ANALYSIS AND INTERPRETATION

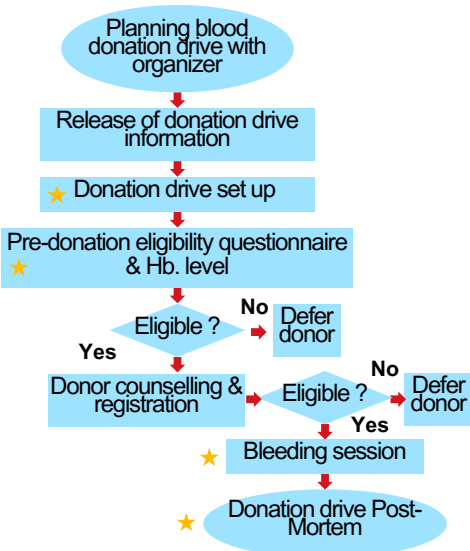


Model of Good Care

Process	Criteria	Standard	Pre-remedial	Post-remedial
Release of donation drive information	<ul style="list-style-type: none"> Monthly donation drive planner Timely promotions in social media or other communication platform Donor education on donation eligibility 	100%	60%	100%
Donation drive set up	<ul style="list-style-type: none"> Staff and equipment to be allocated in accordance to target Site visit for new organizer and drive venue 	100%	50%	80%
Bleeding session	<ul style="list-style-type: none"> Appropriate donor to bleeder ratio in each donation drive 	100%	60%	80%
Donation drive post-mortem	<ul style="list-style-type: none"> Post-mortem expanded to unsuccessful donation drive 	100%	30%	80%

STRATEGY FOR CHANGE

Process of Care



Remedial Action

1 Newly Established RUNNER SYSTEM



- 1 bleeder will be able to attend > 1 donor at a time
- Reduce waiting time
 - Time saving
 - Reduce unsatisfactory donation

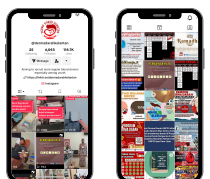
2 100% Site Visit for New Organizer & Drive Venue



3 Effective Guided Post-Mortem



4 Systematic Resources Allocation Using Google Spreadsheet & Timely Drive Information to Social Media



Drive Name	Collection Target	Collected Blood
Donor Day 2022	500	548
Donor Day 2023	600	639

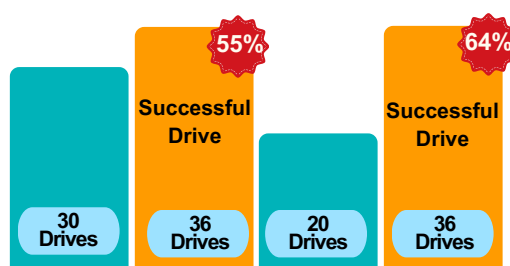
EFFECT OF CHANGE

Contributing factors

Contributing factors	Pre-Remedial	Post-Remedial
Long waiting time for bleeding session	40%	20%
Low bed/bleeder to donor ratio	50%	20%
Ineffective donation drive post-mortem	70%	20%
Delayed release of donation drive information	40%	0%

Pre-Remedial

Post-Remedial



70% Standard

55% Pre-remedial study

64% Post-remedial study

ABNA: reduced from 15% to 6%

Study impact

Successful donation drive hosting may:

- Provide sustainable blood supply for patients' need
- Enhance **cost-effectiveness**, reduce wastage \$\$
- Attract future potential sponsors and donors
- Assure blood quality

THE NEXT STEP

- Implement this study to other hospital with blood collection activities
- Enhance networking with existing and potential organizer
- Continuous monitoring on remedial action for any improvements
- Future study on cost-effectiveness of donation drive

References

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