QLL 38

USE THE SYSTEM, NOT THE PHONE: HOW WE REDUCE UNNECESSARY CALLS TO AVOID POTENTIAL ERRORS IN BLOOD BANK LABORATORY OF QUEEN ELIZABETH HOSPITAL

HOSPITAL QUEEN ELIZABETH

Saliz Mazrina Shaharom[1], Caroline Nilus[1], Cindy Chin Sze Mee[1], Faridah Jonius[1], DK Ruhanah Pg Othman[1]
[1]Transfusion Medicine Unit, Hospital Queen Elizabeth, Kota Kinabalu, Sabah

1 INTRODUCTION

In 2016, two Transfusion Errors (TE) occurred in Queen Elizabeth Hospital (QEH), Kota Kinabalu, Sabah. The Malaysian Patient Safety Goal has set a standard of zero for the number of TE for all Malaysian Hospitals. Distraction by phone calls to the Medical Laboratory Technologists (MLT) mainly for tracing blood availability was identified as the probable cause. There was no tracing system available in QEH for hospital staff to use at the time except by calling the Blood Bank directly to inquire.

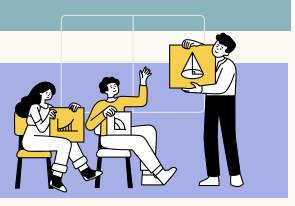
2 AIM

This study is aimed at introducing a tracing system known as the Blood Bank Tracing (BBTC) via the existing hospital iLab (Laboratory Information System) to reduce the number of phone calls received in order to eliminate potential errors.

3 METHODOLOGY

Study design	• Quantitative Interventional Quasi experimental controlled before and after study
Sampling Technique	• Purposive sampling
Sample Size	• 100% all calls will be recorded
Data collection tool	• Data collection daily sheet recording all calls • Buku panggilan telefon
Duration	• Pre remedial: October - November 2022 • Remedial: December 2022 - May 2023
Inclusion criteria	• All calls received by Blood Bank counter
Exclusion criteria	• All calls from private practices (GKK, JMC etc) • All calls regarding Massive Transfusion Protocol (MTP)

4 RESULTS



Before the implementation of BBTC, during the pre-remedial period, there was an average of 1337 calls received with 1278 calls were regarding the availability of blood. This was an average of 639 calls per month or 21 out of 22 calls received per day were only to inquire if blood was ready to be collected. This was distracting and avoidable.

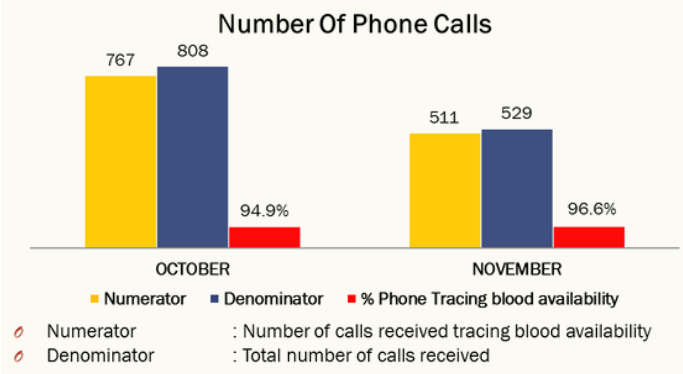
PRE REMEDIAL ANALYSIS

PRE REMEDIAL ACTION

Numerator — Number of calls received tracing blood availability

Denominator — Total number of calls received

MONTH	Numerator	Denominator	% Phone Tracing blood availability
OCTOBER	767	808	94.9
NOVEMBER	511	529	96.6
TOTAL	1278	1337	95.6



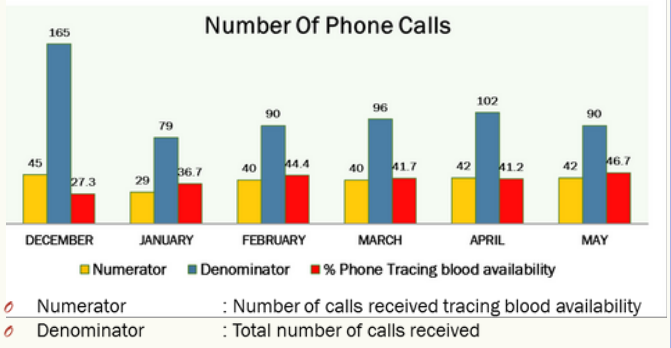
REMEDIAL ACTION IMPLEMENTED ANALYSIS

REMEDIAL ACTION

Numerator — Number of calls received tracing blood availability

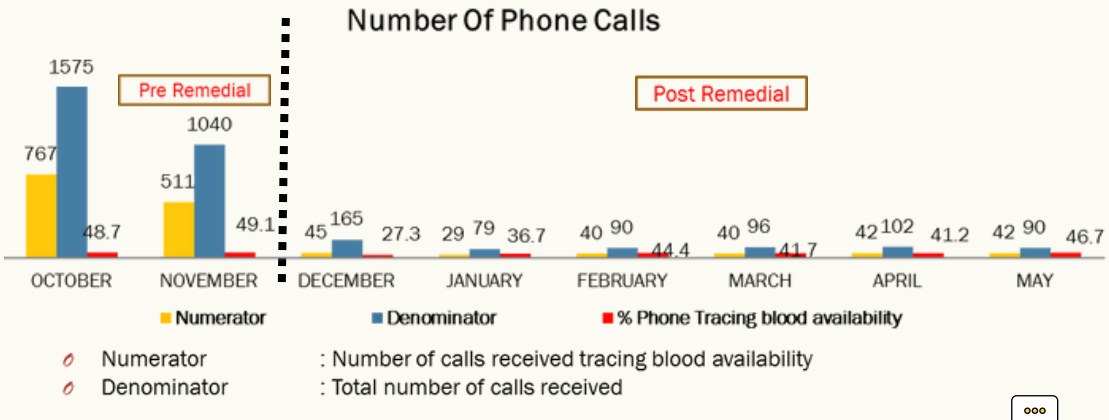
Denominator — Total number of calls received

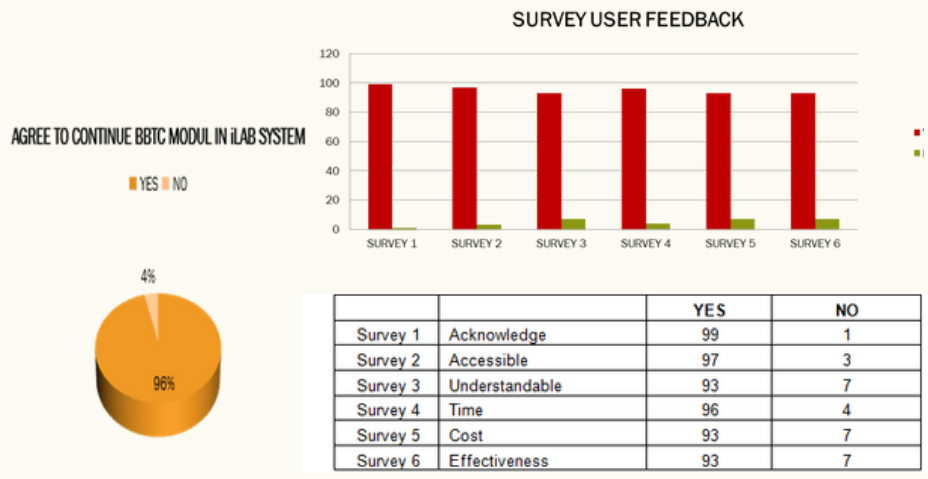
MONTH	Numerator	Denominator	% Phone Tracing blood availability
DECEMBER	45	165	27.3
JANUARY	29	79	36.7
FEBRUARY	40	90	44.4
MARCH	40	96	41.7
APRIL	42	102	41.2
MAY	42	90	46.7
TOTAL	238	622	38.3



After the BBTC implementation, number of calls received decreased to an average of only 104 calls/month with 38.3 % (40 calls/month) were regarding availability of blood (only 1-2 calls per day). This made a big difference in the work environment of the Blood Bank

COMPARISON PRE REMEDIAL AND POST REMEDIAL ANALYSIS





		YES	NO
Survey 1	Acknowledge	99	1
Survey 2	Accessible	97	3
Survey 3	Understandable	93	7
Survey 4	Time	96	4
Survey 5	Cost	93	7
Survey 6	Effectiveness	93	7

5 DISCUSSION & CONCLUSION

1. When there are limitations identified in a work place, try to use whatever resources that are available and implement the changes for improvement of service.
2. Customer feedback after implementing changes are always important to evaluate the success of the programme.
3. The role and responsibility of all staffs are important in order to create a safe and condusive working environment.

A user feedback survey done showed positive reviews from the BBTC users regarding system acknowledgement, accessibility, comprehensibility, time and cost saving as well as effectiveness.
96% agreed for continuation of the system.

Best of all, there was NO transfusion error or near miss seen during this study period.

ACKNOWLEDGEMENTS

OUR GRATITUE TO THE DIRECTOR GENERAL OF HEALTH MALAYSIA, DIRECTOR OF SABAH STATE HEALTH DEPARTMENT (JKNS), DIRECTOR OF QUEEN ELIZABETH HOSPITAL, TRANSFUSION MEDICINE UNIT QEH, PATHOLOGY DEPT QEH (I-LAB TEAM), QUALITY TEAM OF QEH & JKNS AND EVERYBODY WHO HAVE CONTRIBUTED DIRECTLY OR INDIRECTLY TOWARDS THIS PROJECT.

REFERANCE:

MEDICAL CARE QUALITY SECTION, MEDICAL DEVELOPMENT DIVISION, MINISTRY OF HEALTH MALAYSIA (2021), MALAYSIAN PATIENT SAFETY GOALS 2.0 GUIDELINES ON IMPLEMENTATION & SURVEILLANCE : GOAL NO 4: TRANSFUSION SAFETY. PUTRAJAYA: MINISTRY OF HEALTH MALAYSIA. PP. 35-38