REJECTED NO MORE!

A Journey to Decrease Rejected Laboratory Samples in Heart Hospital High Dependency Unit A

Author: Jessy Cherian HN, Imelda Ebus SN, John Balaong SN, Nirmala Issac CN

Background

Clinical laboratories play a crucial role in the diagnosis and management of patients. The increased focus on patient safety and awareness that the information provided by these laboratories has direct impact on diagnosis and treatment of patients. It becomes evident that rejected laboratory samples and errors have significant impact on patient care, since they reduce the chances of correct diagnosis and treatment.

The most common errors encountered after receiving the sample in laboratory is Hemolysis and Clotted Samples.

Goal

To decrease the number of Rejected samples and meet the benchmark of 0.4 by June 2017

Methodology: PDSA Model

P: Data Collection was done and reviewed. Planned to monitor staff blood collection practices and other factors that may affect blood sample rejection.

D: Refer to TimeLine of Activities

S: Data from this measures has been analyzed and there has been decreased rejected samples.

A: This measures will be continued to be implemented and continuous data collection will be done to find out how to decrease rejected samples till the benchmark is met.

Timeline of Activities

APRIL-MAY 2016
- INCREASED NUMBER OF REJECTED SAMPLES HAS BEEN IDENTIFIED

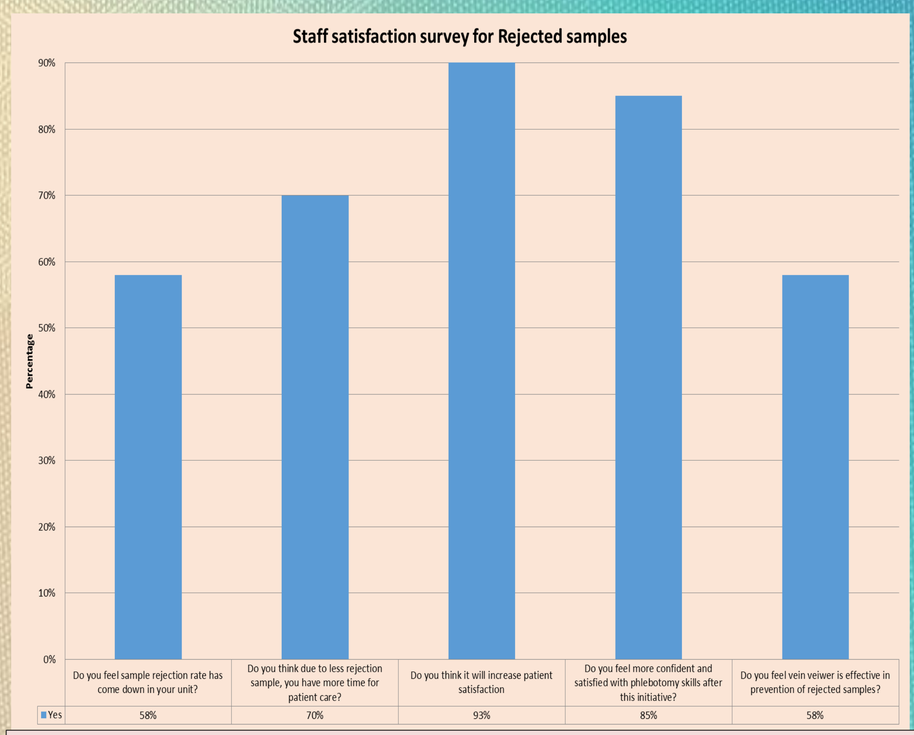
JUNE-JULY 2016
- DATA COLLECTION HAS STARTED

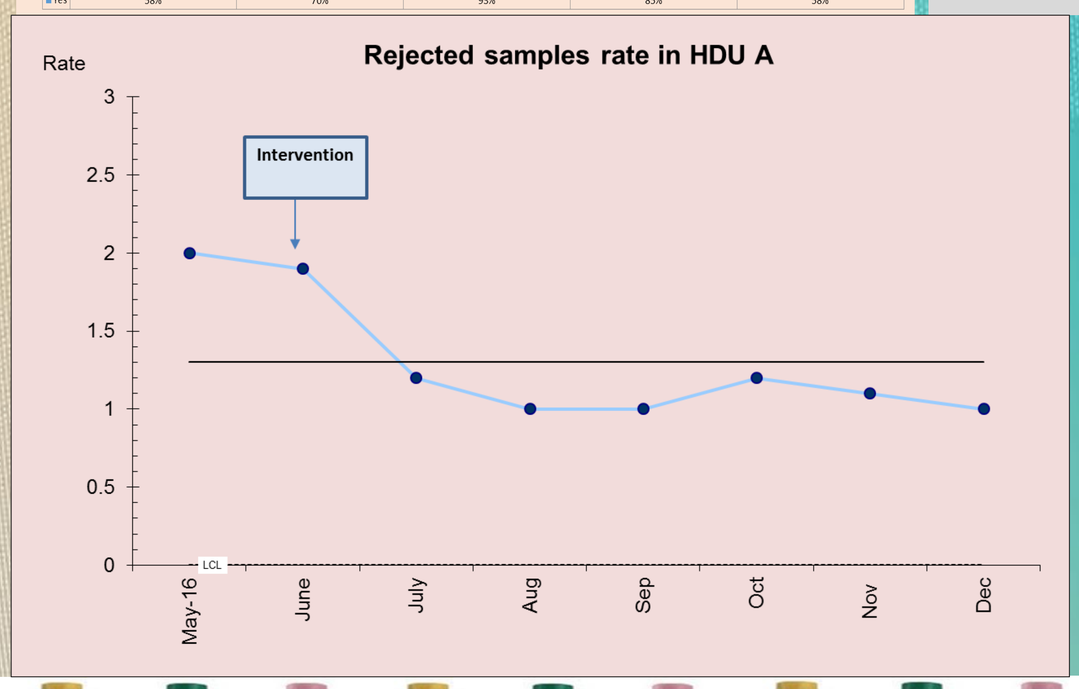
AUG-OCT 2016
- UNIT BASED TASK FORCE WAS FORMED
- MONITORED THE REJECTION RATE OF THE SAMPLES
- IDENTIFIED FACTORS THAT MAY CAUSE REJECTED SAMPLES
- USE OF VACCUTAINERS ENCOURAGED
- BLOOD COLLECTION FROM IV CANNULA WAS DISCOURAGED
- TEAM LEADERS WERE SENT TO PHELEBOTOMY LABORATORY FOR VALIDATORS TRAINING

NOV-DEC 2016
- GREEN TUBES WHERE USED FOR CHEMISTRY SAMPLES
- IN DECEMBER, ALL LAB SAMPLES WERE MANUALLY SENT TO THE LAB
- STAFF SURVEY WAS DONE
- REVALIDATION OF STAFF COMPETENCY IN PHLEBOTOMY WAS DONE BY VALIDATORS
- PHYSICIAN & NURSE REVIEWED THE NEED FOR DAILY BLOOD COLLECTION

JAN-FEB 2017
- PRESENTATION FOR SAFE BLOOD COLLECTION PRACTICE WAS DONE IN THE UNIT
- MULTIDISCIPLINARY TEAM WAS FORMED

Data





CONCLUSION

Specimen rejection has significant clinical consequences including patient discomfort, delay in result availability and management.

By re education of health care personnel there was an increase level of confidence in phlebotomy and a decrease rejection rate.

It was proven that Pneumatic Tube System has no effect in hemolysis of blood samples.

We have learned that the journey to decrease blood sample rejection is a long and continuous process that requires a multidisciplinary approach. Doctors, Nurses, Laboratory Technicians, Hospital Leaders and other health care workers must work together in order to address this problem. Concise information for all healthcare personnel on proper technique of blood collection to promote patient safety.

Team Members

Team Leader: Jessy Cherian, Head Nurse

Sponsor: Emad Al Omari, Director of Nursing

Coach: Dr. Poonam Gupta, Senior Quality Reviewer

Team Members: Nirmala Isaac,CN, John Balaong SN, Sherin Celestine SN, Remya Rajan SN, Roseline Prabha SN

References

- Guimiraes, A. (Jan 2012). Causes of rejection of Blood Samples in Clinical Laboratory. https://www.researchgate.net/publication/51758189_Causes_of_rejection_of_blood_samples_handled_in_the_clinical_laboratory_of_a_University_Hospital_in_Porto_Alegre

ACKNOWLEDGEMENT

Prof. Wiliam McKenna, Chief Executive Officer, Heart Hospital
Mr. Paul Mavin, Executive Director HH
Mr. Ian Mcdonald , AEDON
Ms. Fadia Ali , AED Quality