

Rakesh Kumar Luhar, Dr. Ripal J. Shah, V. Harimoorthy
QA Coordinator, Medical Director, Quality Director
Prathama Blood Center-Ahmadabad.



Abstract

Background: The healthcare management system, particularly blood transfusion management, plays a vital role in modern medicine. Regular monitoring of quality objective in both medical and non-medical parameters in a blood center is essential to ensure effective blood transfusion services. Identifying and correcting deficiencies in a timely manner is crucial to maintaining high standards of care for patient and donor safety.

Aim and Objective: Current study was carried out to measure the impact of monitoring of quality objective and how it can be used as a tool for Continuous Quality Improvement (CQI).

Material and Methods: This retrospective analysis was conducted at one of the largest standalone blood centers in Western India. Blood centre is ISO certified since 2010 and we used to maintain data as per ISO standard since 2010. The data was analyzed from April 2010 to March 2024 to calculate 14 quality objective and quality objectives is defined by ISO 9001-2015 QMS.

Results: After evaluation of these 14 years' data, it was observed that total Blood collection is 476,925 and an average of blood collection in six months is 17033, and the target average in six months of 1975 blood collection per Monthly – blood donation camp (BDC) only with Repeat BDC 68.60%, Number of donor awareness & motivation Programs 100%, Donor adverse reaction was 0.6%, Low quantity with 1.0%, whole blood damage was 0.3%, expired Platelet was 7.7%, Post transfusion reaction was 0.04%, Donor feedback analysis was 97.1%, Patient Feedback analysis was 80.7%, NAT Invalid Batch presented with 1 batch, Attrition rate was 2.8%, virology batch Fail 1 batch, Material storage Incident was 7 nos.

Conclusion: Quality objective are essential tools that stakeholders in Blood Transfusion Services must implement to enhance quality performance. By tracking and analyzing these objective, Blood centers can identify the areas for improvement, optimize processes, and ultimately ensure the provision of high-quality blood components and services.

Keywords: Quality indicators (QI), Quality Objective (QB), Quality management system (QMS), Continuous Quality Improvement (CQI), Performance Indicator (PI).

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