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## **ABSTRACT**

**Introduction:** The practice of collecting the specimens for huge number of patients in the early morning hours is daunting task for the laboratory department of any hospital. Along with accuracy and reliability, timely reporting of laboratory test results is now considered an important aspect of the quality services provided by the clinical laboratory. The laboratory work is composed of technical activities of analysis as well as managerial activities in order to carry on the flow of process.

**Methodology:** The study is cross-sectional in nature conducted at Rockland Hospital, Dwarka Sector-12. The workflow of laboratory was thoroughly observed and major and minor problems were identified that resulted in increased TAT for various tests carried in the hospital's laboratory. A sample of 219 for month of March and 71 for April excluding all the missing reports and tests which were done for the Hospital staff was taken from the LIS of the hospital and was analyzed using MS Excel 2007. Also minor problems were identified and correlated for their impact on the workflow.

**Results:** TAT was found to be highest for almost all the investigations done in the month of March since the samples were sent to Rockland, Qutub. While reduction in TAT was observed in the month of April since the investigations were started in the Dwarka itself but when compared with stated benchmark by the Rockland hospital, Qutub, TAT was still on higher side. The other problem areas were also found to have an impact on efficiency of laboratory systems.

**Conclusion:** The organization should itself set its benchmark and provide the accurate and timely services in order to keep its patients happy and satisfied. Focus on streamlining the procedures with collaboration of whole of the department will bring the things into sync.

**Keywords:** Laboratory services, Improving the workflow of Laboratory, Turnaround time (TAT), laboratory TAT, Quality of Laboratory, Efficient Laboratory services.

## **ABBREVIATIONS**

- CAP College of American Pathologists
- CBC Complete Blood Count
- CSSD Central Sterilization Supply Department
- ESR Erythrocyte Sedimentation rate
- ED Emergency Department
- F&B Food & Beverage
- FO Front Office
- HIS Hospital Information System
- ICU Intensive Care Unit
- ISO International Organization for standardization
- IPD Inpatient Department
- LFT Liver Function Test
- LIS Laboratory Information System
- LOS Length of Stay
- NABH National Accreditation Board for Hospital and Healthcare Providers
  
- NICU Neonatal Intensive Care unit
- OPD Outpatient Department
- POCT Point of Care Testing
- PT Prothrombin Time
- RFT Renal Function Test
- TAT Turnaround Time
- TPA Third Party Administrator
- TSH Thyroid Stimulating Hormone