ABSTRACT

Diagnostic services are pivotal component in providing optimal patient care. Delays in reporting laboratory tests would cause a considerable delay in the diagnosis and treatment of patients. Hence timeliness of laboratory process has a huge impact of optimal care. Turnaround time is a significant measure of laboratory performance.

The objective of this project was to reduce laboratory turnaround time in Base Hospital Tangalle.

The project has qualitative and quantitative components including Focus Group Discussions, In depth interviews and time motion study. The turnaround time of five selected investigations of inward patients were measured by time motion study considering three stages namely pre analytic, analytic and post analytic.

Median pre analytic time for urgent and routine tests was 68 and 47 minutes respectively. Median post analytic turnaround time for urgent and routine tests was 89 and 99 minutes respectively. Analytic time was varied according to the test due to different techniques and equipments used for different tests. It was found that most of the delays occurred in pre and post analytic stages. Hence, intervention was designed to address this issue. Identified intervention was using "messenger service" for transport of specimens and collection of reports. After the implementation project, pre analytic time for urgent and routine investigations was 44 and 28 minutes respectively. For post analytic time for urgent and routine investigations it was 63 and 44 minutes respectively.

Results demonstrated statistically significant reduction in the time taken for pre and post analytic stages. It is concluded that easy to implement administrative strategies would help to reduce delay in low resource settings.

Key words: Delay, Laboratory, Turnaround Time, Pre analytic, Post analytic