Aim

To develop a user-friendly laboratory operations performance dashboard to facilitate the monitoring of laboratory workload.

Methodology

Data processing was done and translated into meaningful information and visualized via Tableau.

A laboratory management dashboard (Fig. 1) was produced to capture patient demographics, laboratory services and time taken per lab service.

Fig. 1

Fig. 2 shows the distribution of patient visits throughout the day. The dashboard allows customized selection/s for the Type of Appointments, Clinic, Month, Week, Day of the Week and Hour of the day. This heat map provides detailed insights on when are the busy periods of each day (Fig.2). With this information, we are better equipped to assign lab appointment slots for forward bookings.

Fig. 2

We can observe if patients arrived early/on time, whether are they late, or if there is a delay in providing lab services.

Fig. 3

Fig. 4 shows the distribution of patients by workstation, enabling us to study the workload by the type of appointments.

Conclusion

The laboratory dashboard is a valuable tool that provides administrators a clear overview of operational efficiency in the laboratories. The information presented allows them to make more informed decisions in an ever-increasingly challenging clinical environment.