INTRODUCTION

The laboratory management system is conceived for use in the laboratory. Before the late 1970s, the management of laboratory samples and the related analysis and reporting were time-consuming manual processes often screened with [transcription error](https://en.wikipedia.org/wiki/Transcription_error)s. This gave some organizations incentive to streamline the collection of data and how it was reported. The purpose of building this system is to eradicate the frequent loss of patient information data in respect to tests conducted. The purpose is also to speed up laboratory process. This is carried out by reducing overall manual processes carried out by staff. Processes as manual recording of patient data leads reduces productivity especially when demand is high. Often at times, patient information is lost or mixed with records of other patients. This system makes it possible to store, manage and receive data. Thereby increasing productivity.

With the growing need to integrate healthcare information systems, this system makes it possible to integrate with other healthcare related systems. The system allows users to obtain, store, manage, retrieve and record laboratory data.

The exponentially growing bulk of data produced in laboratories, coupled with increased business demands and emphasis on profitability, has created the need to pay attention to how electronic data exchange increases in effectiveness. Attention must be paid to how an instrument's input and output data is managed, how remote sample collection data is imported and exported, and how mobile technology integrates with the LIMS

The key functions of laboratory management system include but not limited to sample management, instrument and application integration, and electronic data exchange.