

Introduction to Laboratory Informatics: Life of a Result

Where do Data and Results Live?

Laboratory data and test results need to be properly stored and managed to be acted on. Proper data storage is a critical component of ensuring data integrity throughout laboratory processes.

All data and results must be stored; however, they can live in many places within the laboratory.

The main repository for all of the laboratory's data and results is usually a LIMS. The data stored in the LIMS includes select patient personal and medical information, all specimen data, as well as raw and analyzed data from the laboratory.

Information is held in a relationship structure in a database called a schema. This schema allows for the linkage of the test results data with specimen information and other data related to laboratory process and possible patient information.

Results can be recorded in one of two ways. Laboratory staff can manually enter data and results into the LIMS or they can be automatically entered through an electronic interface with the testing instrument.

For laboratory informatics capabilities and impact to be fully realized, two things need to happen. First, there must be accurate and high quality data. Second, data must be tracked and stored within a LIMS.