

# Basic Concepts: the LIS-Scope and Functionality (LIS-SAF) Project

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Increasingly necessary for pathology and the clinical labs to operate efficiently in this era of cost-containment and reform.

Pathologists and other lab professionals  
rewarded by hospital executives for  
efficient management of the laboratories.

Major component of efficient management is T-LISF, defined as the sum of the functionalities of all IT deployed in the labs.

Most efficient way to optimize T-LISF is with a best-of-breed (BoB) LIS + supplemental modules/middleware. Goal is creation of an integrated lab database.

Best-of-breed LISs provides superior functionality in comparison with all competing systems in market. May vary based on needs/type of lab operation.

Some LISs perceived as being BoB but may not meet this test; may be fractionated and lack an integrated lab database.

Major criteria for an integrated lab database: (1) enables rules across all labs/data; (2) all results can be published in a unified report. Efficient deployment of rules increases quality of results and reduces lab manpower needs.



A lab-centered, rules-efficient database enables lab professionals to convert test results into actionable information. Can't be achieved with only an EMR database.

Creating actionable information is the  
essence of precision medicine:  
converting results to therapeutic  
recommendations for clinicians. This is  
the future for pathology!

Hospital executives tends to favor an enterprise wide solution (EWS) because easier for them to manage. Strategy will not avoid lab interfaces and not necessarily cheaper.

An enterprise-wide-solution (EWS) with an embedded, suboptimal LIS can harm lab efficiency and increase costs. Will probably fall short in various functionality categories.

Hospital executives may have different perspective about the value of an EWS than labs. They may favor emphasis on an EMR database as a substitute for a lab-centric, lab-functional one.

Hospital executives may thus impose the goal of an EWS on the diagnostic departments at the cost of their decreased efficiency and higher operating costs.

Lab professionals must develop a data-driven relationship with the C-suite, highlighting the true costs of a decreased pathology T-LISF.

This C-suite preference for an inadequate LIS embedded in an EWS can be altered if lab professionals agree to serve as a systems integrator for a BoB LIS + all other lab software.



The role of pathology as a systems integrator cannot be achieved without support from LIS vendors who need to collaborate with other lab software vendors.