



APHL Position Statement

Consolidation of Information Technology Services

A. Statement of Position

APHL advocates for formal agreements between IT leaders and laboratory leaders to assure successful efficient informatics implementations, networking, and interoperability between PHL jurisdictions. Formal agreements need to be written so they are clearly understandable by both the IT and laboratory staff and specifically reflective of the business functions the laboratory relies on technology to deliver. The document must include the wide range of technologies, governance, and resource support necessary to assure laboratory information delivery.

B. Implementation

1. APHL will continue to provide communication and operational guidance for laboratory leaders on the following components of laboratory informatics:
 - **Technologies** such as the LIMS and associated hardware and software.
 - **Governance functions**, such as contract oversight, budgeting for IT products and services, policymaking and other management activities.
 - **Technical support**, including software customization, staff training, troubleshooting and other activities to implement commercial technologies and

otherwise assist end- users.

2. APHL will work with national organizations such as NASCIO and partners to assure that laboratory leaders are prepared to negotiate with IT leaders to lay out the laboratory business case and, within the business case, necessary IT services, along with associated costs, risks, metrics, and implementation strategies.
3. APHL will continue to provide references that laboratory leaders can use to document IT services agreements in a formal MOU and SLA (s) with appropriate laboratory signatories.
4. APHL will continue to link the importance of interoperability and data standardization requirements with successful informatics implementations at the national and individual jurisdictional level.

C. Background/Data Supporting Position

APHL recognizes the importance of informatics as a critical component of public health laboratory operations and delivery of services. In many jurisdictions laboratory participation in informatics may be changing as centralized or shared IT services are in use or under consideration. Once thought of as a support function, the delivery of laboratory IT services has now evolved to the point where electronic recordkeeping and automated data management are mission-critical components

of public laboratory operations. While laboratories may once have had complete local control over essential informatics and computing systems, this is not always the case today. Many jurisdictions are moving to either consolidated (aka „centralized“) information technology (IT) services or move to shared services (a hybrid model with aspects of centralization and decentralization). In fact, the National Association of State Chief Information Officers (NASCIO) reports that consolidation of IT services is the number one priority for state chief information officers (CIOs) in 2011, followed by cost control and healthcare IT solutions.

This trend has the potential to greatly impact public health and governmental laboratories. In general, IT centralization may increase efficiency in some areas, reduce costs and enable the laboratory to access equipment or services that were previously unaffordable. However, caution must be taken to avoid poor implementation choices, insufficient communication among partners and weak management structures which can increase costs and have disastrous effects on a laboratory's ability to fulfill its mission. It is often discovered that the informatics requirements in a laboratory are not well understood by traditional IT departments. These benefits and risks have the potential to greatly impact public health and governmental laboratories

The laboratory, specifically Laboratory Directors, face significant civil and criminal liabilities related to secure and accurate electronic data held by the laboratory.^{1,2} Directors or managers of centralized/shared IT services have no such liabilities codified by federal laboratory law, therefore it is essential for the laboratory director to be involved in every aspect of data management.

Successful information systems optimize operational efficiency to benefit laboratories and their customers. To be successful, modern

laboratory leaders need to understand the difference between consolidated and shared IT services models, drivers of IT consolidation, possible impacts on the laboratory and factors to consider when negotiating with centralized IT leaders. While laboratory leaders cannot control all of these factors, they can equip themselves to advocate effectively for their organization to maximize the upside and minimize the downside of IT centralization.

While shared IT services arrangements can take many forms there are some common approaches that laboratory leaders can use to negotiate with IT leaders. Focusing first on the totality of the laboratory IT infrastructure (which is more than just the laboratory information management system or LIMS) is important. This totality includes: technologies, governance, and support. Typically, memoranda of understanding (MOUs) and service level agreements (SLAs) are the two major tools recommended for IT services negotiations and ongoing management. These agreements document the IT activities that are necessary for successful laboratory operations. IT and laboratory leaders can use these tools to communicate and document the costs, risks and metrics of laboratory IT services. The documents must convey the importance and functions of laboratory services, and be written with clear business laboratory case models so they are clearly understandable by both the IT and laboratory staff. This also facilitates a discussion between the laboratory and IT management to find ways to meet IT and laboratory compliancy while supporting and possibly adjusting the laboratory or IT processes.

Often multiple laboratories work collaboratively with other agencies and states during emergency responses, outbreaks/investigations, surges. In these cases it is often necessary to collaborate and consolidate resources necessary for efficient delivery of services, data exchange and

interoperability between laboratories. The MOU and SLA can serve as formal tools to be shared between jurisdictions to assure interoperability between PHLs and other agencies. To reach this goal, laboratories, IT leaders, programs, and LIMS vendors all need to partner and agree on recognized standards for the delivery of data, content, nomenclature, and formats, and exchange capability etc.* Formal agreements at the jurisdictional level provide additional assurance to networked laboratory partners that electronic data exchange will be available when called on.

*As an example, the Public Health Laboratory Interoperability Project (PHLIP) seeks to foster collaboration in the areas of information technology and laboratory science, with the immediate goal of developing, piloting and deploying viable IT architecture options and tools for the exchange of electronic laboratory data.

D. References

1. Clinical Laboratory Improvement Act of 1988, 42 CFR 493
2. Select Agent Rule, 42 CFR 72 and 42 CFR 73

D. Other Resources

1. The APHL informatics committee developed a white paper “THE BRAVE NEW WORLD OF CONSOLIDATED AND SHARED IT SERVICES :A Guide for Laboratories” to provide laboratories with guidance to identify, distinguish, and negotiate components of operational agreements to successfully employ consolidated IT services. This paper is available to download and may be useful to both laboratory and IT leaders.
2. NASCIO. State CIO Top Ten Policy and Technology Priorities for 2011. October 2010. Posted at www.nascio.org/publications/
3. <http://www.aphl.org/aphlprograms/informatics/collaborations/phlip/Pages/default.aspx>
4. An Interoperable and Integrated Federal Data Exchange Network for Environmental and Environmental Health Data

Recommended by: The Informatics Committee, Approved by Board of Directors for Interim Use: September 2012, Approved by Membership: December 2012, Sunset Date: December 2017

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