

Laboratory Efficiencies Initiative

Partners Forum

December 13, 2012
The Association of Public Health Laboratories
8515 Georgia Ave, Suite 700
Silver Spring, MD 20910



Meeting Summary

Purpose

The purpose of the forum was to provide partner organizations a standing, structured opportunity to contribute to the LEI, facilitate ready exchange of information about the LEI, and find where there could be alignment of LEI activities with partner public health priorities. All states have suffered significant cuts in budget and work force. In order to maintain quality public health services expected of the state and local health offices, efficiencies need to be addressed across all public health sectors to find appropriate local solutions and to contribute to national needs. The LEI is contributing to this effort by targeting the state and local public health laboratories but can only succeed if this is woven into the entire public health system.

Goals

This meeting provided LEI stakeholders the opportunity to:

- Gain information about APHL and CDCs' vision and mission of the LEI.
- Review examples of products and tools that have been created or are in stages of development to assist public health laboratories in becoming more efficient in laboratory operation and management.
- Explore efficiency-related activities that the partners are considering and have adopted.
- Engage in open discussion to explore opportunities for collaboration on additional efficiency related directions.

Participants

Partner Representatives:

Arlene Stephenson, Chief of Staff, APHA

Paul E. Jarris, MD, MBA, Executive Director, ASTHO

Alfred DeMaria, Jr., MD, Infectious Disease Steering Committee Chair, Executive Board Member, CSTE

Paul Etkind, DrPH, MPH, Senior Director of Infectious Diseases, NACCHO

CDC Representatives:

Judy Monroe, MD, Director, Office of State, Tribal, Local and Territorial Support (via teleconference)

May Chu, PhD, Director, Laboratory Science, Policy and Practice Program Office (LSPPPO), CDC

Dan Jernigan, MD, MPH, Deputy Director, Influenza Division, NCIRD, CDC (via teleconference)

John Ridderhof, DrPH, Senior Advisor for Planning, LSPPPO, CDC

Tony Moulton, PhD, Associate Director for Policy, LSPPPO, CDC

APHL Representatives:

Scott Becker, Executive Director, APHL

Eric Blank, DrPH, Senior Director Public Health Systems, APHL

Peter Kyriacopoulos, Senior Director of Public Policy, APHL

Karen Breckenridge, Director of Quality Systems, APHL

Sadira Daher, Senior Specialist Quality Systems, APHL

Introduction to the LEI (Presented by Dr. Judy Monroe and Dr. Dan Jernigan via teleconference)

The concept of the LEI originated through Dr. Frieden, Director, Centers for Disease Control and Prevention (CDC), to identify opportunities for public health laboratories to survive budget cuts, staff reductions, and effects on testing services.

It is beneficial for public health as a whole if health officers are engaged with laboratory directors and with the LEI. Partner organizations are involved in work that overlaps with the LEI. If all are fully engaged the three key elements for building a successful leadership model from the Center for Creative Leadership will be evident. All will then see direction or where we are heading; alignment or coordination of activities and funding and commitment from all for the greater good of the organization. The Office of State, Tribal, Local, and Territorial Public Health (OSTLT) made 12 recommendations, three of which are in the areas of workforce development (epidemiology and laboratory), medicine (diagnosis), and public health (shared services) which are key elements of the LEI.

It is very important for LEI to bring visibility of public health laboratory testing to decision makers. To assist in obtaining that visibility it is important to find answers to the questions of “What should public health be delivering or what tests should PH laboratories be conducting?” and “What can be shared or done more efficiently?”

Dr. Frieden has identified 3 areas of focus for the next 4 years. What he would like to see accomplished are in the areas of: 1) better public health and clinical medicine integration especially in the communities and aligned with healthcare reform, 2) improve and build stronger public health infrastructure and sustainable systems, and 3) safeguard our nation by ensuring we build health security for , nationally and globally (public health response to influenza is a good example) . Lessons learned with the influenza Right-sizing project can be used to help LEI activities. Laboratories are central to public health agencies and are relied on for any number of public health activities. Going forward, laboratories need to make activities measurable and need the flexibility to change quickly to meet current needs.

The LEI Direction (Presented by Dr. Eric Blank and Dr. John Ridderhof)

The LEI vision is for a sustainable and integrated network of public health laboratories. The mission of the LEI is to assure that the public health laboratory network efficiently provides high confidence scientific evidence to drive decision-making that protects and improves the health of the public.

The LEI strategic plan lays out seven goals of the initiative as to:

1. Implement and sustain innovative laboratory management practices
2. Assure that public health laboratories have full informatics capability to participate in electronic information exchanges

3. Identify and address institutional, legal and policy barriers to greater efficiency
4. Assure that resources, infrastructure and partnerships are sufficient adequate to meet the LEI mission
5. Communicate, inform and educate on the critical purpose of public health laboratories and the value of LEI in sustaining them
6. Transform the continuum of public health laboratories to a culture of efficiency
7. Develop a comprehensive public health laboratory workforce strategy

State and local public health laboratories are the driving force behind the LEI. APHL members need to be involved in how best to meet the needs for their jurisdictions and make key decisions for the LEI.

LEI Activities with Partner Discussions (lead by Dr. Eric Blank and Dr. John Ridderhof)

Data Sharing

A key component of the Laboratory Efficiency Initiative (LEI) is the collection and access of data about the state and local public health laboratories that has been and will continue to be collected regarding their capabilities, capacities, organizations and services.

The LEI subcommittee has been working on how to consolidate information already collected from APHL and CDC surveys into a new searchable database to facilitate data sharing. The immediate work of the subcommittee is to ensure data sharing agreements are in place and if laboratories need new types of agreements.

In addition to the accessibility and consolidation of the survey data the subcommittee is working on adapting a CDC database tool to be a management database for use by individual laboratories. This database will be a repository of information about personnel, certification, tests performed, and equipment inventory. The database will reside at the laboratory but information will be uploaded to APHL on an annual basis. Reports about public health laboratories as a whole will be generated and laboratories will be able to compare their activities with others and know who is doing the same work in case of need for additional capacity.

Discussion points:

- ASTHO has a Biosense agreement that can be reviewed and shared as an example of a data sharing agreement.
- There is a need for a national data sharing agreement (across all public health sectors?)

Efficiency Resources: APHL and CDC have created resources and tools to address the needs of public health laboratories in relation to the LEI. APHL and CDC created the resource: [A Practical Guide to Assessing and Planning Implementation of Public Health Laboratory Service Changes](#) to assist laboratory directors in assessing if a change in testing services is needed and suggestions for implementing those changes. The [Overview of Legal Considerations in Assessing Multijurisdictional Sharing of Public Health Testing Services](#) is another resource for laboratories which provides guidance on policy and other legal considerations for sharing services. Training has been provided for PHL staff on Lean and how it can improve efficiency in the laboratory. A forum was held to discuss various options on procurement for laboratory equipment and supplies. APHL is following up by looking at the potential of group purchasing of laboratory testing instrument service contracts. In addition a guide for policy and legal issues related

to laboratory efficiency is in progress. The policy guide will have information and templates from individuals and laboratories who have worked through policy-related matters.

Discussion points:

- It may also be useful to research and adopt techniques from outside of public health to address these types of issues.
- Recommendation to contact Priscilla Fox from MA on some legal considerations
- Need to determine how the role of the PH laboratory is changing

Emerging Technologies

It is important to have discussions on emerging technologies often to ensure that Public Health Laboratories (PHLs) keep up with potential new, useful technologies. Laboratories need to remain adaptable to address changes and growth of industries such as home-kit testing for HIV and how that has affected patient follow-up and care.

Currently, APHL members have different capabilities in technology. APHL and CDC have been in the process of bridging discussion between program areas at CDC about reducing the numbers of test platforms and adaptation of emerging technologies. The LEI has given PHLs more confidence to talk to manufacturers about what the needs of the PHLs are, giving the opportunity for PHLs to compete in new technology. In addition, meetings have been held by CDC and APHL to address the strategic selection of testing platforms so that multiple tests could be performed from a single instrument.

Discussion points:

- It is important to keep in mind that as the environment changes more people may choose to contract out to private sector laboratories. Even so the private sector does not conduct every test that PHLs can, some because the tests are not profitable and others as they may not have access to the reagents or protocols.
- NACCHO sent out a survey to 2800 health departments and found that 622 health departments offer some form of laboratory services. However, because it was self-reporting and did not include the definition of a PH laboratory, the responses varied depending on who completed the report.
- In general, there needs to be more understanding of what services there are at a local level. Local laboratories are complex. There are many environmental laboratories and some small clinics with laboratories conducting waived testing. Appropriate emerging technologies might be different depending on laboratory size and type.

Workforce competencies

APHL has a large workgroup of members to address the issue of workforce. Workforce areas include preparing future leaders, strengthening the knowledge of the current workforces and encouraging others to enter the fields of PH laboratory science. There is a need for post-doctoral programs to prepare those for becoming directors of public health laboratories. There have been a number of proposals for post-doctoral programs, but nothing in place at the moment. An APHL/CDC working group is developing PHL competencies to address PHL workforce support to both strengthen the current workforce and to properly prepare the incoming workforce. The proposed completion date for the workforce competencies plan is March of 2013.

Informatics

There is a disparity in informatics capabilities in laboratories. Some laboratories have updated capabilities while others are still using paper systems and cannot report electronically. Dr. Frieden and others at CDC are pushing for improvements and laboratory informatics is a large part of the proposed \$20 million budget initiative.

To assist in determining the needs of the PHLs, an informatics self-assessment tool is in development. The tool will document the baseline metrics of what labs do electronically. CDC's vision is to assist in providing funding that complement meaningful use and electronic reporting. The goal of the one-time funding will be to get the state and local laboratories on a par. CDC funding will get the process started, though PHLs will need to put in the work in implementing these activities.

The sustainability of improvements made for laboratory information system maintenance is a key issue. For example some laboratories do not have the resources to get the next version of STAR LIMS. APHL's aim is to know where PHLs are at in the area of maintenance. It is expensive to maintain and sustain the system and best approaches are still in determination.

Discussion points:

- Epidemiologists face similar issues in obtaining electronic reports.
- To avoid any hesitancy in physicians using PHLs, it must be addressed that they expect to receive electronic results and generally do not. Some laboratories have the capability for integrated information exchange, but it is not universal.

Consortia

Consortia can provide test service sharing, data sharing, and training to public health laboratories. They provide infrastructure, enabling multiple programmatic efforts to assure access to a certain testing capacity. Ideally a consortium would be made up of groups of about four laboratories, possibly geographically located and one level of support from CDC would be in the form of a person to manage the shared services. Examples of successful consortiums are already in place in New England and the Northern Plains. The New England states consortium meets quarterly to collectively address how to work out solutions to various issues facing the public health laboratory community. The Northern Plains consortium shares some testing services and also collaborates on training together. This also means that public health laboratories know they can rely on neighbors for preparedness. It can also mean that states can expand their services by having access to tests that they would not have on their own.

APHL and CDC have worked on creating potential successful models. [A Practical Guide to Assessing and Planning Implementation of Public Health Laboratory Service Changes](#) provides examples of what some laboratories have found to be successful. APHL members will decide if they would like to partner with others for sharing of services or the possibility of a consortium.

Discussion points:

- If possible it could be a good idea to get PHL directors together to discuss the issues of sharing test services and how it might be organized. With assessment of what works well, some states end up executing a reverse regionalization and reacquire certain test taking responsibilities.

- In relation to planning for consortia, it was suggested that it could be beneficial to design the laboratory system from scratch as an exercise to see what might be a good direction for the LEI. What should the future state be?
- The construction of successful consortia depends on the decisions of participating states. Laboratories can figure out locally what works for them as opposed to CDC dictating. CDC suggests incentivizing the use of consortia by various funding awards. It is a decision that must be made by individual laboratories. There needs to be a list of which laboratories are doing which tests so labs can have the opportunity to form a consortium based on the laboratory's needs.
- Suggestion to use lessons learned such as from the Mid-America Alliance (a preparedness group), why did it fall apart?

Funding

Anticipated proposals for 2013 LEI funding include assessing the potential to share testing services for a multistate consortia; conducting Lean, Six Sigma, and other analyses for workflow efficiency; implementing billing systems for revenue generation; and addressing laboratory informatics gaps in software, policies, and practices.

There is a proposal to use the ELC grants as a mechanism for getting funds to the PHLs for many of the LEI activities; it would be a supplement to the ELC grant. The thought for now is that consortia funding would have to be one-time, though ideally it would be continuous.

In the area of revenue generation, there are many of unanswered questions about whether laboratories would be able to keep revenue they have generated. There is no incentive for generating revenue if it means other funding is cut or the revenue is not available to the PHLs. Though revenue generation will not be universal, there should be some universal principles for laboratories to use that choose to adopt revenue generating practices.

In addition, infrastructure building must be continuously funded. One-time money needs to be maintained by around 10% to keep activities going and CDC is aware of this.

Discussion Points:

- For revenue generation, there may be opportunities for building on current models of billing that are in place. Many labs do bill for some services, but not to all providers.
- ASTHO conducted a survey on billing. The results can be reviewed as some of those findings may be useful for next steps.

Key Points for Follow Up

- Communication between the partner organizations needs to continue.
- Look at the Laboratory System Improvement Project (L-SIP) as a way of strengthening how all stakeholders work together and possibly look at how the L-SIP assessment could be used across a consortium.
- There is an investment in creating efficiencies. The focus should be on the future savings and not just the present costs.
- Collaborate to obtain public health funding through the policy programs at ASTHO and APHL.
- There are some questions about system hurdles, not just laboratory policy issues that APHL will determine how to best address.

- The test service database will be valuable and is needed sooner-- not later. It is anticipated that it will provide a more complete picture of what goes on in public health laboratories.
- APHL and CDC can investigate what would be needed to do a specific study about local PHLs, in conjunction with NACCHO.
- In efforts for APHL and CDC to better articulate what LEI is, some rebranding is recommended.
 - It is about the 21st century PHL and sustainability.
 - The term “efficiency” might make directors think they will have budgets cut. Is this image a good or bad thing?
- To give the LEI a public face, APHL and CDC will submit articles to partner organization’s publications and submit abstracts for sessions on LEI at organizational meetings, note: NACHHO and CSTE have a call for abstracts out now, with deadlines quickly approaching.
- Share information and LEI updates at the ASTHO Senior Deputy Director meetings.
- The LEI partners committee will have an annual face to face meeting and conference calls as needed.
- After the meeting, partners should let APHL know if we missed anything in the LEI conversation in retrospect.