

LOUISVILLE METRO GOVERNMENT

Louisville Metro Public Health and Wellness

Laboratory System Improvement Program Assessment

Leslie A. Wolf, PhD, HCLD(ABB)

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An assessment of the local public health laboratory system was conducted on 4/23/2015 in Louisville, KY. Over 50 stakeholders participated in assessing and scoring the system based on the 10 essential public health services.

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1. Executive Summary

On April 23, 2015, Louisville Metro became the 3rd local public health laboratory system to complete a Laboratory System Improvement Program (L-SIP) assessment. Approximately 51 partners representing various parts of the local laboratory system, such as clinical laboratories, environmental laboratories, local health department leaders and supervisors, Jefferson County Public School system, first responders, corrections, information technology specialists, Kentucky Division of Laboratory Services, Office of the Mayor, and Board of Health attended the event that was held at the Foundation for a Health Kentucky in Louisville, KY.

After welcoming remarks from Dr. Sarah Moyer, Medical Director and Interim Director of the Louisville Metro Health and Wellness Department (LMPHW), Dr. Leslie Wolf, Director of the LMPHW laboratory, shared examples of past collaborations between the local laboratory and its partners. Many of these examples fell under the umbrella of essential public health services. Karen Breckenridge, Director of Quality Systems at the Association of Public Health Laboratories (APHL), provided an orientation to the laboratory system assessment process and led the entire group through a practice evaluation and voting for Essential Service #2 (Diagnose and Investigate Health Problems) as a facilitator. After the plenary, participants were divided into three breakout groups and were each assigned three of the remaining nine essential services to evaluate during the course of the day. Each breakout group had a skilled facilitator knowledgeable of public health, but not a member of the laboratory.

At the end of the assessment day, the participants gathered together for the closing plenary session when the scores for each of the Essential Services were projected onto a screen. Essential Services #6 (Enforce laws and regulations that protect health and ensure safety) was seen as relative system strength, with an overall score in the significant range. Essential Services #2, 7, and 8 had scores in the moderate range, while all other services had scores in the minimal range. The lowest scoring Essential Services were #4, 9 and 10 (scores of 5, 2.5 and 5, respectively). These essential services focus on mobilizing community partnerships to solve community health problems, evaluating effectiveness, accessibility, and quality of health services, and researching insights and innovative solutions to solve health problems.

During the closing session, after the voting results from each breakout session were shared, one to three next steps, challenges, or key ideas for each essential service were highlighted. Quality improvement initiatives will be developed from the LMPHW L-SIP Assessment. Opportunities for networking, coordination, cooperation and collaboration will be explored in order to better deliver the ten essential public health services to the residents and visitors in Louisville Metro area.



2. Introduction

a. Purpose of L-SIP

L-SIP was developed to aid in the improved performance of both state and local public health laboratory systems, with the goal of continuous quality improvement. The Association of Public Health Laboratories (APHL) and the Centers for Disease Control and Prevention (CDC) Laboratory Science, Policy and Practice Program collaborated on development of L-SIP and the assessment tool to accomplish the following objectives:

- Assess the public health laboratory system’s performance
- Plan for public health laboratory system improvements
- Implement improvement strategies for the public health laboratory system
- Evaluate the effects of the strategies on the system
- Re-assess the public health laboratory system’s performance

b. Development of L-SIP Assessment Tool

In 2002, the National Public Health Performance Standards Program (NPHPSP) was established by CDC and its partners. The NPHPSP identifies and measures the components, competencies and capacities of state and local public health systems, as well as local public health governance using standards based on the ten essential public health services. The L-SIP concept was conceived from the NPHPSP.

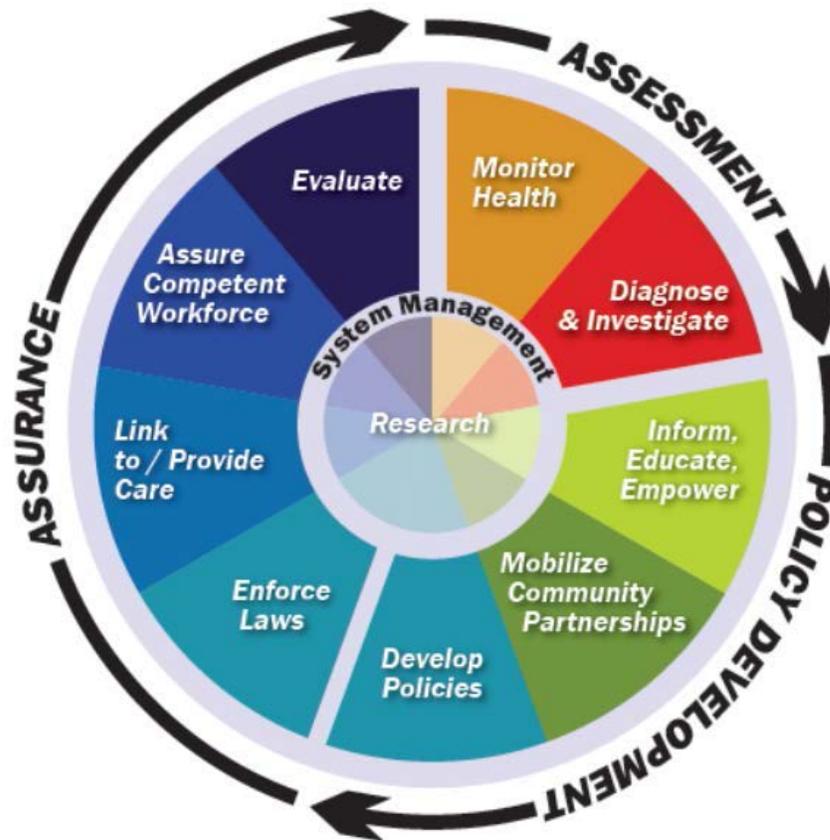
The L-SIP assessment tool is the foundation of the program and is intended to aid in identification of public health laboratory system strengths and gaps. The tool was developed through collaborations between laboratory experts and partners and was first used in 2007. The tool was revised in 2011 based on feedback from public health laboratory partners.

Using Model Standards, the assessment tool was designed as a way to measure performance of the entire public health laboratory system, not only the state or local public health laboratory itself. The tool includes standards set to the ideal or optimal performance by a public health laboratory system. The process depends upon the participation, support and collaboration of a wide range of stakeholders and partners that have a role in the system.

c. Framing Concepts

It is important to understand the concepts that are foundation to the L-SIP assessment. These five concepts are as follows:

1. The assessment centers around delivery of the ten essential public health services. Use of the ten essential public health services assures that the tool covers public health activities needed at both the state and local levels.
 2. The assessment incorporates all of the 11 Core Functions of state public health laboratories. The APHL L-SIP User Guide contains a cross-walk of the ten essential public health services and 11 core functions in Appendix D.
 3. The assessment focuses on the overall state or local public health laboratory system rather than a single organization or laboratory. This ensures that the contributions of all partners and stakeholders are recognized while assessing performance of the ten essential public health services.
 4. The assessment measures against an optimal level of performance (“gold standard”) rather than a minimal level of accepted standards, allowing for continuous quality improvement of the system.
 5. The assessment supports the commitment to a process of continuous improvement. System partners use the results of the L-SIP assessment process to guide planning for improvement activities that encompass the entire public health laboratory system.
- d. The Ten Essential Health Services
1. Monitor health status to identify community health problems (ASSESSMENT)
 2. Diagnose and investigate health problems and health hazards in the community (ASSESSMENT)
 3. Inform, educate, and empower people about health issues (POLICY DEVELOPMENT)
 4. Mobilize community partnerships to identify and solve health problems (POLICY DEVELOPMENT)
 5. Develop policies and plans that support individual and community health efforts (POLICY DEVELOPMENT)
 6. Enforce laws and regulations that protect health and ensure safety (ASSURANCE)
 7. Link people to needed personal health services and assure the provision of health care when otherwise unavailable (ASSURANCE)
 8. Assure a competent public health and personal health care workforce (ASSURANCE)
 9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services (ASSURANCE)
 10. Research for new insights and innovative solutions to health problems (CENTERPIECE)



Source: <http://www.health.gov/phfunctions/public.htm>

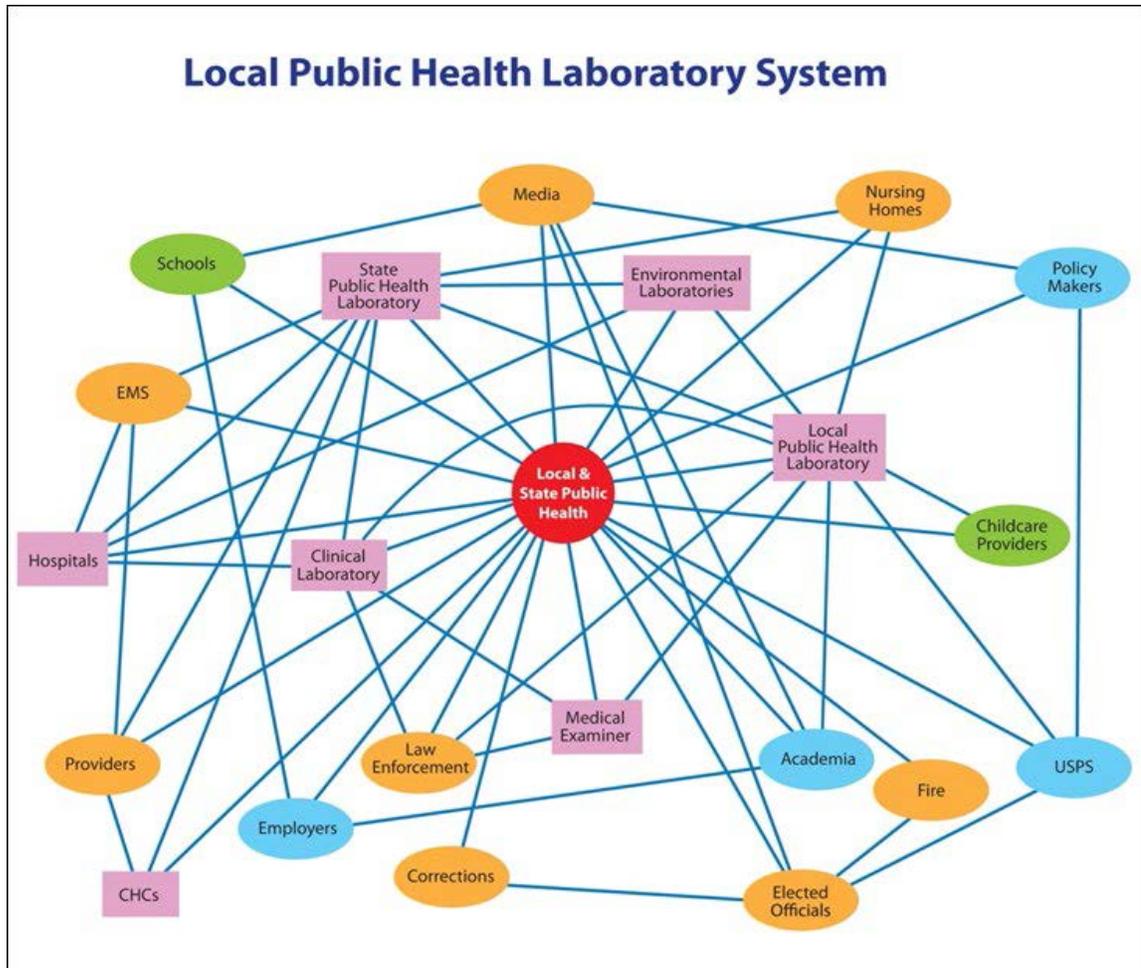
- e. Eleven Core Functions of a Public Health Laboratory
 1. Disease Prevention, Control and Surveillance
 2. Integrated Data Management
 3. Reference and Specialized Testing
 4. Environmental Health and Protection
 5. Food Safety
 6. Laboratory Improvement and Regulation
 7. Policy Development
 8. Public Health Preparedness & Response
 9. Public Health Related Research
 10. Training and Education
 11. Partnerships and Communication

Source

: http://www.aphl.org/AboutAPHL/publications/Documents/APHLCoreFunctionsandCapabilities_2014.pdf

f. Definition of a public health laboratory system

A public health laboratory system is an alliance of laboratories and other partners within a state or locality that supports the ten essential public health services. System members and stakeholders operate in an interconnected and interdependent way to facilitate the exchange of information, optimize laboratory services, and help control and prevent disease and public health threats.



3. Background

It is important to understand how collaborations are required to deliver public health laboratory services. To this end, some examples of successful collaborations with laboratory system partners are provided in this section. Clinical laboratory services include testing for sexually transmitted diseases in support of LMPHW Specialty Clinic, Family Health Centers, Corrections and the MORE Center. In addition, urine drug screening supports the work of the Jefferson Alcohol and Drug Abuse Center and the MORE Center. Blood lead screening

provides screening for children and adults in the Louisville Metro area and other counties, while the Kentucky Division of Laboratory Services provides lead testing for environmental samples related to elevated lead levels identified by LMPHW testing.

Environmental health laboratory services include testing recreational water (swimming pools, water parks, spray pads, *etc.*) for the presence of fecal coliforms, as well as testing mosquitoes for the presence of West Nile Virus. These test results aid in ensuring that recreational water is sanitary and help direct where fogging should be targeted to prevent the spread of mosquito borne illnesses within the Louisville Metro area. Close coordination among partners ensures that appropriate testing occurs in a timely manner in order to reduce the risk of disease transmission.

In the arena of public health preparedness, the laboratory collaborates with the LMPHW Environmental Health Division on exercises and participates in training activities with other first responders. The laboratory also facilitates sample submission to the KY Division of Laboratory Services in Frankfort during emerging infectious disease events. Recent examples of these events include influenza H1N1, MERS and Ebola virus.

The LMPHW laboratory collaborates with academic partners and vendors to address issues related to workforce development and applied research. Recently, the laboratory submitted two research proposals to University of Louisville School of Public Health and Information sciences. The projects are suited for Master's level students' practicum requirements and support Healthy Louisville 2020 goals. In the past, students from Ivy Technical Community College rotated through the laboratory to experience a public health testing environment. In addition, the laboratory hires a temporary worker to help with the increased workload of recreational water sampling in the summer months, and this position is generally a recent college graduate so that they have a practical public health experience. Finally, there is an ongoing partnership with the vendor that provides a non-treponemal screening assay to LMPHW. The laboratory helped evaluate a card reader to replace the manual read and made many suggestions to improve the product. As a result, future collaborations are in development with this vendor due to this successful project.

4. Assessment Process

The assessment process begins with commitment of laboratory leadership to the L-SIP assessment, formation of a steering committee and selection of a project coordinator. The LMPHW laboratory began these critical planning steps in October 2014. Early decisions included choosing an L-SIP Assessment date, finding a venue, and selecting key stakeholders to invite to the day-long meeting. Support from APHL was instrumental for a quick start, and the L-SIP User's Guide was the roadmap to planning a successful meeting.

The project timeline provided in the User's Guide allowed for a realistic planning period and for major tasks to be assigned a leader from the steering committee and a target deadline for each task to be completed. In this way, key stakeholders in the local public health laboratory system and facilitators were identified and invited well in advance of the chosen L-SIP Assessment date. Background information (the definition of a local public health laboratory system, the ten essential public health services, and the 11 core functions of a public health laboratory) was disseminated to participants. As the L-SIP Assessment day grew closer, additional information from the L-SIP Assessment Tool and breakout group assignments were shared so that participants could focus on the three essential public health services they would be responsible for evaluating.

During the day-long meeting, participants evaluate the performance of the local public health laboratory system in supporting the delivery of the ten essential public health services. A skilled facilitator was assigned to one of three breakout groups and led the group through a discussion of the key ideas and specific examples related to the essential public health service. After a healthy discussion, a vote was taken to determine the level of activity for that service or key idea, and in some cases, further discussion was needed to clarify disparate voting results, and a re-vote was taken. Themetakers (LMPHW laboratory staff) assigned to each breakout group captured key ideas from the discussion, results of voting, next steps and parking lot issues.

The approach using the L-SIP Assessment Tool for facilitated discussion, themetaking and scoring allowed for all ten essential public health services to be evaluated in one day. At the end of the assessment day, summary scores, significant challenges and prioritized next steps were shared with all participants. The next steps are used to develop a quality improvement plan that will engage key stakeholders in making system improvements. Information gathered from the L-SIP Assessment is shared with participants in a timely manner to maintain engagement of stakeholders in continuous quality improvement initiatives that improve the state public health laboratory system.

- Orient to process
- Review & discuss
 - Capture issues to address later
 - Gain consensus responses
- Input responses
 - For each ES identify the top 1-3 next steps
- Discuss results & evaluate process
- Summarize next steps





5. Summary, Results and Analysis

a. Essential Service #1: Monitor health status to identify community health problems

Overall Score: 12.0 (Minimal)

- i. Key Idea 1.1.1 *The LPH Laboratory System identifies infectious disease and environmental sentinel events, monitors trends, and participates in state and federal surveillance systems.*

Rating: **Moderate**

Strengths: Environmental monitoring (Metro Sewer Dept—streams and recreational water; Louisville Water Company-Ohio River; State-pools and beaches; LMPHW pools/recreational water and mosquitoes for WNV); Clinical laboratory reporting (hospitals, private labs, public health labs); participate in multiple surveillance systems, such as influenza surveillance

Challenges: Multiple methods of data collection and no central repository; reporting by private physicians office reporting and private food laboratories; and systemic issues with lead reporting

- ii. Key Idea 1.1.2 *The LPH Laboratory System supports the monitoring of chronic disease trends by participating in state and federal surveillance systems.*

Rating: **Minimal**

Strengths: Indirectly getting by reports of number of people dying of cancers; getting clinician diagnosis from lab data; some screenings and surveillance

Challenges: Most data is interview based and self-report dependent; no data translation or trend analysis; and lack of communication due to HIPAA regulations

- iii. Key Idea 1.2.1 The LPH Laboratory System has a secure, accountable and integrated information management system for data storage, analysis, retrieval, reporting and exchange.

Rating: **Minimal**

Strengths: At state level, it is integrated and local public health laboratories have access to state information via PSR, Outreach, Psyche, and EMIS as examples; Good real-time data reporting on TB results and reports from state; Outreach and Harvest have two way communication capabilities; future Health Info Exchange will have the capability for real-time data exchange

Challenges: Not integrated at local level; have to manually request real-time data now; IT security is an overwhelming challenge.

- iv. Key Idea 1.2.2 The LPH Laboratory System partners collaborate to strengthen electronic surveillance systems.

Rating: **Minimal**

Strengths: Generally evaluate data systems; data for lead and WNV are evaluated at the program level for their contribution to monitoring

Challenges: Lack of fiscal resources; evaluation does not include surveillance component of system; evaluation not broad in scope, but limited to individual or program level

- b. **Essential Service #2:** Diagnose and investigate health problems and health hazards in the community

Overall Score: 33.0 (Moderate)

- i. Key Idea 2.1.1 *The LPH Laboratory System assures the effective provision of services at the highest level of quality to assist in the detection, diagnosis and investigation of all significant health problems and hazards.*

Rating: **Moderate**

Strengths: Certifications/accreditation of regulated laboratories for clinical and environmental testing via CMS/CLIA, TJC, CAP, USDA, EPA, FDA and AIHA; sharing of resources within hospital community; public health advisories; once case reported, it is investigated

Challenges: Frequency of inspections of regulated laboratories; high level communication among whole community is lacking; lack of feedback on diseases reported; unclear where to find necessary information (e.g. measles and TB); many internal and external communication breakdowns

- ii. Key Idea 2.1.2 *The LPH Laboratory System has the necessary system capacity, authority, and preparations in place to rapidly respond to emergencies that affect the public's health.*

Rating: **Moderate**

Strengths: Ability to test unknown samples is at KY Division of Lab Services (EOC, tracking number, immediate email/phone results and CDC communication); Louisville Metro has a lot of preparedness resources and basic foundation for ICS exists; frequent exercises and drills; example of smell incident when EMS/Fire/Public Health and TARC collaborated to solve problem
Challenges: COOP at local level does not exist; need documentation of communication protocols

- c. **Essential Service #3:** Inform, educate and empower people about health issues

Overall Score: 19.0 (Minimal)

- i. Key idea 3.1.1 *The LPH Laboratory System creates and delivers consistent information to community partners about relevant health issues associated with laboratory services.*

Rating: **Moderate**

Strengths: Communication with partner organizations; Norton provides rotavirus data to CDC; laboratory data often triggers a response effort
Challenges: consistent communication mechanism lacking; not well connected to professional societies; need a system to distribute information and education on how to share and report data; shared press releases

- ii. Key idea 3.1.2 *The LPH Laboratory System creates and provides education opportunities to health and non-health community partners.*

Rating: **Moderate**

Strengths: Multiple information modes and varying levels of complexity (lead, influenza, rabies); work proactively with media to educate partners (HIV change)
Challenges: Many ways to educate but using national data for education, not local data; how to determine if data shared is used to educate?; need to educate providers on how to test

- iii. Key idea 3.2.1 *Relationship-building opportunities are employed to empower community partners.*

Rating: **Minimal**

Strengths: L-SIP is a great start to building relationships; health screenings and health fairs occur in community; lab services for pregnant women; example of JADAC breakfast meeting

Challenges: Need to generate more opportunities for relationship building; share zip codes with highest rates of elevated lead or HIV to encourage more testing in areas of concern

- d. **Essential Service #4:** Mobilize community partnerships to identify and solve health problems

Overall Score: 5.0 (Minimal)

- i. Key idea 4.1.1 *Partners in the LPH Laboratory System develop and maintain relationships to formalize and sustain an effective system.*

Rating: **Minimal**

Strengths: Some pieces come together for specific events and Health Louisville 2020 goals require partnerships with community.

Challenges: The system does not exist therefore there is no shared mission, vision and values.

- ii. Key idea 4.2.1 *LPH Laboratory System members communicate effectively in regular, timely and effective ways to support collaboration.*

Rating: **Minimal**

Strengths: Emergency communications work well with first responders being able to use the same systems

Challenges: Routine communications don't work as well and there are no newsletters for external customers; Need basic information on website and contact list within laboratory system

- iii. Key idea 4.3.1 *The LPH Laboratory System has a process in place to receive and share existing resources and to identify new resources to assist in identifying and solving health issues.*

Rating: **Minimal**

Strengths: L-SIP meeting is a first step in building relationships; environmental partners work well together and share resources; KY DLS assists with putting equipment in place and there are collaborations with U of L and UK.

Challenges: Need more collaboration and funding to help convene meetings to build relationships and partnerships; there has not been a systematic approach; would like more information back from state.

- e. **Essential Service #5:** Develop policies and plans that support individual and community health efforts

Overall Score: 14.3 (Minimal)

- i. Key idea 5.1.1 *The LPH Laboratory system obtains input from diverse partners and constituencies to develop new policies and plans and modify existing ones.*

Rating: **Minimal**

Strengths: Development of HIPAA policies and Healthy Louisville 2020 were collaborative; Needle exchange program is a good example of local and state agencies working together; Committed to health in all policies; use published information to change laboratory practices (e.g. TB PCR vs AFB smears)

Challenges: Need consistency across policies to address health issues; funding cuts; Increase percentage of health issues included in all policies

- ii. Key idea 5.2.1 *The LPH Laboratory System and partners contribute their expertise and resources using science and data to inform and influence policy.*

Rating: **Moderate**

Strengths: Use of CDC and APHL recommendations for testing algorithms and biosafety practices; Broad examples include health in all policies, smoking bans in certain public parks; plans to address hookah bars and e-cigarettes/vaping based on evidence

Challenges: At times conflicts between science/data and politics; policies in jails and rehab centers vary; inconsistent policies at state and local levels sometimes

- iii. Key idea 5.3.1 *The plans and policies that affect the LPH Laboratory System are routinely evaluated, updated and disseminated.*

Rating: **Minimal**

Strengths: Not evaluated, updated or disseminated as a whole.

Challenges: Need to improve collection of feedback from partners; plans and policies need to be updated and disseminated; people not on the same page; improve documentation

- f. **Essential Service #6:** Enforce laws and regulations that protect health and ensure safety

Overall Score: 66.5 (Significant)

- i. Key idea 6.1.1 *The LPH Laboratory System is actively involved in the review and revision of laws and regulation pertaining to laboratory practice.*

Rating: **Moderate**

Strengths: Laboratories are regulated by state and federal laws; national organizations lobby on behalf of laboratories (APHL) and post updates on website; Louisville Water Company involved in regulation and law making; collaborated among environmental labs to address change in waste water laboratory regulation

Challenges: Keeping up with proposed rule or law changes; sharing information within laboratory system

- ii. Key idea 6.1.2 *The LPH Laboratory System encourages and promotes compliance by all laboratories in the system with all laws and regulations pertaining to laboratory practice.*

Rating: **Optimal**

Strengths: Federal and state regulations require adherence to maintain accreditation or certification or licensing; individual laboratory commitment to quality assurance and quality control practices

Challenges: Staying current on changing rules that affect laboratories (HIPAA rule allowing patients to contact labs for test results, FDA regulation of LDTs)

- g. **Essential Service #7:** Link people to needed personal health services and assure the provision of healthcare when otherwise unavailable

Overall Score: 36.0 (Moderate)

- i. Key idea 7.1.1 *The LPH Laboratory System identifies laboratory service needs and collaborates to fill gaps.*

Rating: **Minimal**

Strengths: KY DLS has telephone number for after hours, and web access to results after hours if needed; turn-around-times (TAT) monitored by laboratories

Challenges: No one is aware of the tests done by other laboratories; lack of chain of custody for all samples transported; need for gap analysis, directory of services and overarching SOGs.

- ii. Key idea 7.1.2 *The LPH Laboratory System provides timely and easily accessed quality services across the jurisdiction.*

Rating: **Significant**

Strengths: Many tests are provided in the jurisdiction by various clinical and environmental laboratories; timely transport; timely reporting; address access for sparse areas (e.g. lead)

Challenges: Need to share information among laboratories and assure access to expertise within the system

- h. **Essential Service #8:** Assure a competent public health and personal healthcare workforce

Overall Score: 30.3 (Moderate)

- i. Key idea 8.1.1 *All laboratories within the LPH Laboratory System identify position requirements and qualifications; assess competencies and evaluate performance of all laboratory workforce categories across the entire scope of testing.*

Rating: **Significant**

Strengths: Federal and state regulations require competency assessment and employees are hired based on education (degree), skills and experience; licensed technologists have background and training to work in regulated laboratory environment

Challenges: new hires with 4 year degrees (biology, chemistry, etc) lack knowledge of quality control and quality assurance

- ii. Key idea 8.2.1 *The LPH Laboratory System accommodates tours from area schools and colleges and maintains an environment to attract and retain highly qualified staff.*

Rating: **Minimal**

Strengths: Some laboratories provide tours; some areas have opportunity for growth and development within the Department; Louisville Metro Government

Office of Performance Improvement set aside \$200,000 for professional development; some laboratories offer flexible schedules

Challenges: Generally poor at recruitment; low pay scale in public health; in some areas, managers paid less than staff

- iii. Key idea 8.3.1 *The LPH Laboratory System works to ensure a competent workforce by encouraging and supporting staff development through training, education and mentoring.*

Rating: **Moderate**

Strengths: Louisville Metro Government launches Lynda for professional development via public library system; Louisville Water Company supports staff seeking degrees; Louisville Metro Government offers some tuition assistance for degrees

Challenges: No funding for certifications and help with Master's Degrees is small relative to cost.

- iv. Key idea 8.3.2 *The LPH Laboratory System identifies and addresses current and future workforce shortage needs.*

Rating: **Minimal**

Strengths: Need for future workforce identified and discussed; some collaboration with academic institutions

Challenges: Shortage of Medical Technology or Clinical Laboratory Sciences schools; need career ladders for laboratory positions; pay scale needs to be addressed; tough to cover responsibilities while staff are in extensive training

- i. **Essential Service #9:** Evaluate effectiveness, accessibility and quality of personal and population-based services

Overall Score: 2.5 (Minimal)

- i. Key idea 9.1.1 **The LPH Laboratory System range of services, as defined by its mission and purpose, is evaluated on a regular basis**

Rating: **None**

Strengths: None

Challenges: Range of services, mission and purpose of the laboratory system do not exist currently.

- ii. Key idea 9.2.1 *The effectiveness of the personal and population-based services provided throughout the local jurisdiction if regularly evaluated.*

Rating: **Minimal**

Strengths: Individual agencies do evaluations; there are formal and informal relationships established to accomplish this; through FERPA, JCPS shares health information with providers

Challenges: Need more compatible electronic communications; the individual components are not connected; need an inventory of services

- iii. Key idea 9.2.2 *The availability of personal and population-based laboratory services throughout the local jurisdiction is regularly evaluated.*

Rating: **Minimal**

Strengths: Evaluation occurs within each agency.

Challenges: Because local laboratory system does not exist currently, no system wide evaluation has been done for laboratory service availability.

- iv. Key idea 9.2.3 *The quality of personal and population-based laboratory services provided throughout the local jurisdiction is regularly evaluated.*

Rating: **Minimal**

Strengths: Evaluation occurs within each agency.

Challenges: Because local laboratory system does not exist currently, no system wide evaluation has been done for laboratory service quality.

- j. **Essential Service #10:** Research for insights and innovative solutions to health problems

Overall Score: 5.0 (Minimal)

- i. Key idea 10.1.1 *The LPH Laboratory System has adequate capacity to plan and implement meaningful research and innovative activities to support broad public health goals.*

Rating: **Minimal**

Strengths: Involved in validation of new tests with vendors; some examples of collaboration exist around research (practicum projects, students furthering their education)

Challenges: LMPHW lacks IRB process; need grant funding

- ii. Key idea 10.2.1 *The LPH Laboratory System promotes research and innovative solutions.*

Rating: **Minimal**

Strengths: Some research is available on websites (ky.gov, U of L, Baptist Health Systems); potential for laboratories to collaborate exists

Challenges: obtaining grant funding; no knowledge of research activities among agencies

- iii. Key idea 10.2.2 *The LPH Laboratory System research is evaluated to foster improvement and innovation in application.*

Rating: **Minimal**

Strengths: Amount of data available

Challenges: No tracking of research and a lack of communication; no incentives without grant funds; not enough funds to analyze available data

- iv. Key idea 10.2.3 *The LPH Laboratory System disseminates (basic & applied) research outcomes, best practices and recognition of research activities.*

Rating: **Minimal**

Strengths: Research and best practices are performed within each agency, and information is shared with national organizations (APHL and CDC).

Challenges: Research and best practice activities are not shared locally in a routine format.

6. Discussion and Next Steps

The L-SIP project was the first step in an important process to establish a local public health laboratory system in the Louisville Metro area. While many of the essential public health services scored in the minimal range, #6 was rated as significant activity (enforcing laws and regulations) and others had moderate activity (#2, 7 and 8). The stakeholders agreed that creating a system was important and an annual laboratory meeting was desirable. Numerous improvement opportunities were identified during the one-day meeting that will keep the process moving forward with key partners.

Essential Service #1: Monitor health status to identify community health problems

- A. Develop a central data repository for private physician reporting and share contributions back with community
- B. Obtain expert guidance on data sharing and privacy practices
- C. Develop a central data repository for chronic disease data

Essential Service #2: Diagnose and investigate health problems and health hazards in the community

- A. Improve reporting through collaborations between state and local health authorities
- B. Identify capacity of system to determine what resources are available to share
- C. Develop post-exposure evaluation protocol for HazMat/First Responders

Essential Service #3: Inform, educate and empower people about health issues

- A. Need education and information on how to share and report information and data systematically
- B. Determine what the state is doing to further education and determine what we can do to improve communication
- C. Provide education regarding which laboratory tests are appropriate for our community

Essential Service #4: Mobilize community partnerships to identify and solve health problems

- A. Create email contact list within laboratory community and share 24/7 contact information
- B. Improve websites to better describe laboratory services available
- C. Create working group to address protocols

Essential Service #5: Develop policies and plans that support individual and community health efforts

- A. Identify each agency's strengths
- B. Address funding cuts through innovations
- C. Streamline process to update policies and procedures

Essential Service #6: Enforce laws and regulations that protect health and ensure safety

- A. Develop a laboratory system
- B. Create a list serve to share laboratory information within community
- C. Link review of current regulations/rules to annual policy and procedure reviews

Essential Service #7: Link people to needed personal health services and assure the provision of healthcare when otherwise unavailable

- A. Develop state-wide overarching standard operating procedures
- B. Make directory of services available and update regularly
- C. Define "acceptable" and "timely" with regard to information sharing

Essential Service #8: Assure a competent public health and personal healthcare workforce

- A. Explore partnerships with education community (JCPS, U of Louisville, community colleges, tech schools, etc)
- B. Create work groups to address workforce issues for clinical, environmental and response laboratories
- C. Foster internship program (Practicum catalog, etc)

Essential Service #9: Evaluate effectiveness, accessibility and quality of personal and population-based services

- A. Form a work group to develop mission statement for system and define roles and responsibilities
- B. Need to create inventory of services for the public health laboratory system
- C. Need to create a system to assess capacity for the public health laboratory system

Essential Service #10: Research for insights and innovative solutions to health problems

- A. Publish relevant studies on government websites so they are accessible to community
- B. Strengthen grant writing and encourage collaborations with partners on grants
- C. Explore need for IRB within Health Department for certain research activities



7. Assessment Scores and Other Materials

**SYSTEM PERFORMANCE
ESSENTIAL PUBLIC HEALTH SERVICE**

RATING	1	2	3	4	5	6	7	8	9	10
OPTIMAL										
SIGNIFICANT						66.5				
MODERATE		33					36	30.3		
MINIMAL	12		19	5	14.3				2.5	5.0
NO ACTIVITY										

Louisville Metro Public Health and Wellness

		Summary Scores from APHL Tool	
ES #1: Monitor Health Status	1.1 Monitoring of Community Health Status	19.0	ES #6: Enforce Laws
	1.2 Surveillance Information Systems	5.0	
			66.5
ES #2: Diagnose & Investigate			ES #7: Link People to Services
2.1 Appropriate & Effective Testing	33.0		7.1 Provision of Lab Services
			36.0
ES #3: Inform, Educate & Empower			ES #8: Competent Workforce
3.1 Outreach to Partners	33.0		8.1 Defined Scope
3.2 Empower Partners	5.0		8.2 Recruitment & Retention
			8.3 Assuring Competent Workforce
			67.0
			5.0
			19.0
ES #4: Mobilize Partnerships			ES #9: Evaluation
4.1 Partnership Development	5.0		9.1 System Mission & Purpose
4.2 Communication	5.0		9.2 System Effectiveness
4.3 Resources	5.0		
			0.0
			5.0
ES #5: Develop Policies & Plans			ES #10: Research
5.1 Partnerships in Public Health Planning	5.0		10.1 Planning & Financing
5.2 Role in Laboratory Policy Making	33.0		10.2 Implementation & Evaluation
5.3 Dissemination & Evaluation	5.0		
			5.0

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a. LMPHW Laboratory System Improvement Program (L-SIP) Agenda

April 23, 2015 at the Foundation for a Health Kentucky Conference Facility

Registration	8:00-8:30
Welcome, Introductions, and Overview of the Assessment Day Dr. Sarah Moyer, Medical Director, LMPHW Dr. Leslie A. Wolf, Laboratory Director, LMPHW	8:30-9:15
Plenary: Essential Service (ES) #2- Diagnose and Investigate Health Problems Karen Breckenridge, APHL	9:15-10:15
Break	10:15-10:30
Breakouts: <ul style="list-style-type: none"> • Group A- ES #1- Monitor Health • Group B- ES #9- Evaluate Effectiveness, Accessibility, Quality • Group C- ES #8- Assure Competent Workforce 	10:30-11:45
Lunch	11:45-12:30
Breakouts: <ul style="list-style-type: none"> • Group A- ES #7- Link People to Needed Personal Health Services • Group B- ES #10- Research • Group C- ES #4- Mobilize Partnerships 	12:30-1:30
Break	1:30-1:45
Breakouts: <ul style="list-style-type: none"> • Group A- ES#3- Inform, Educate, and Empower • Group B- ES #5- Develop Policies and Plans • Group C- ES #6- Enforce Laws & Regulations 	1:45-3:00
Break	3:00-3:15
Summary, Evaluation, and Next Steps Dr. Leslie A. Wolf, Laboratory Director, LMPHW	3:15-4:30
Adjourn	4:30

b. Steering Committee Members

LMPHW Laboratory

Dr. Leslie A. Wolf, Laboratory Technical Director

Gwen J. Nixon, Laboratory Technical and General Supervisor

Maura Murphy, Laboratory Technologist

Rochelle Ransom, Laboratory Technologist

Amy Hong, Laboratory Technologist

Carol Glasscock, Laboratory Technologist

Michael Mathis, Laboratory Assistant

Sharon Dean, Management Assistant

APHL

Karen Breckenridge, Director of Quality Systems

Tina Su, Specialist, Laboratory Systems and Standards

LMPHW

Leanne French, Acting Deputy Director and Health Promotion Administrator

Connie Mendel, Administrator, Environmental Health Division

BJ Adkins, Resource Development

Jon Moore, Fiscal Administrator, Office of Management and Budget

Caitlin Herron, Information Technology

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**c. LMPHW Laboratory L-SIP Meeting Evaluation Summary Results
(38 of 51 returned)**

Please respond by placing an “X” in the applicable cell. You may add comments at the conclusion of each section.

Utility of Meeting	1-Strongly Disagree	2-Disagree	3-Neither Agree nor Disagree	4-Agree	5-Strongly Agree
Stated objectives of meeting were met			1	17	20
I understood the objectives of the meeting			3	17	18
Dialogue was useful				14	24
I support the efforts being made				9	27
Next steps are clear			8	19	10
Meeting was a good use of my time		1	4	18	15

Utility of Meeting: Additional Comments

Perfect!

Meeting Arrangements	1-Strongly Disagree	2-Disagree	3-Neither Agree nor Disagree	4-Agree	5-Strongly Agree
Advance notice of meeting was adequate		1		7	30
Meeting Room accommodations were acceptable				5	33
Advance materials for meeting were useful			1	13	24
Advance materials were received with time to review			2	10	26

Meeting Arrangements: Additional Comments

Great! Nice space, yummy lunch and snacks; meeting facility was wonderful; the meeting was well planned and attended and very beneficial; the facilitator Karen was very nice and informative

Explicit directions of “why,” “what,” and “who” of the meeting; Explicit instructions needed to feel prepared; agenda in email; exit door in hallway sometimes sticks

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Flow of Meeting	1-Strongly Disagree	2-Disagree	3-Neither Agree nor Disagree	4-Agree	5-Strongly Agree
Started on time				11	26
Objectives for meeting were clear			1	20	16
Agenda was followed or appropriately amended				11	25
Facilitation was effective			1	11	25
The “right” people were at the meeting		1	6	23	7

Flow of Meeting: Additional Comments Some stakeholders missing (2 comments); a few key groups missing like National Guard and other HazMat Emergency Personnel; Not quite sure I had a lot to add to the conversation; Some people were unable to attend that were needed (Environmental and Media); Representation from a commercial lab such as LabCorp would have been helpful/useful; Budget discussions should happen to check feasibility of recommendations.

What worked well? Working in groups with different areas from the Department; Wide variety; Well organized; Grouping was great; Interaction and format; Meeting set up and small groups; Dialogue between participants was very useful and informational; having breakout groups (2 comments); having a variety of professionals in each group; I think breakout groups really involved everyone; lots of good dialogue; breakout sessions were great; voting cards; process of evaluation; group interactions; exchange of ideas.

What could be improved for future assessments? Facilitator in my group was great, however, it may have been beneficial to change facilitators for each group session just to get a different perspective and facilitation; Additional stakeholders; More people coming that represent every service of the department; smaller number of participants (?); need other stakeholders; Get more non-LMPHW people at the table; continue to communicate; need non-public health professional version of the 10 essential services; more clinicians at the assessment; need glossary for all; This seminar was a great start. We need to make certain to follow through on some of the great ideas; I would have been OK with no lunch but a 1 hour break for ourselves; Need more understanding of what an ideal lab system would look like. Also, shuffle the groups! It would have been great to work with different group of people for each service.

Would you participate in this process again? YES (32) NO (5)

Do you see this as a helpful tool and process? YES (36) NO (0)

Would you be willing to assist with quality improvement initiatives? YES (28) NO (3)

Maybe (3)

Final thoughts: Much needed to identify areas of improvement; thank you for great discussion; Really enjoyed discussions; Very useful, helpful and important; This was great and I applaud Dr. Wolf and her team; Much needed; Great to have all the stakeholders together; Refreshing initiation of communication; Long ways to go

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d. LMPHW L-SIP Invited Participant List

Last name	First name	Title	Agency
Adkins	BJ	Resource Development Manager	LMPHW
Allen	Denise	Nursing Manager	JADAC
Anderson	Calene	TB Program Supervisor	LMPHW
Anderson	Tammy	Chief of Staff	LMPHW
Angelini	Nick	Lieutenant - Metro Corrections	Corrections
Barker	Paul	Lab Manager	Beckmar Environmental Laboratory Inc.
Beeber	Heather	<u>Director of Nursing</u>	LMPHW
Boisseau	Laura	Health Coordinator	JCPS Early Childhood (Head Start)
Boyd	Gretchen	Coordinator for Equipment Procurement/Food Safety	JCPS School and Community Nutrition Serv
Breckenridge	Karen	<u>Facilitator-Karen Breckenridge</u>	APHL-Laboratory Systems/Standards
Casey	Jinny	FHC Laboratory Director	Family Health Centers
Christy	Carri	ENV Health Specialist	Env Hlth-Water
Ciarroccki	Bonnie	Coordinator Health Services	JCPS
Cost	Karen	Board of Health	Norton Health Care
Crabtree	Wayne	Administrator	LMPHW Clinical Services
Dean	Sharon	<u>Management Assistant</u>	LMPHW Lab
Dennison	Lee	Chief of Operations/Lt. Colonel	Louisville Metro EMS
Dickerson	Robyn	Community Health Supervisor	LMPHW-Dixie Clinic
Dotson	Adam	Director of Laboratory Services	KentuckyOne Health
English	Zonetta	Lab Manager	Metro Sewer Department
Forsythe	Briana	Quality Improvement Coordinator	LMPHW
French	Leanne	<u>Administrator-Health Promotion</u>	LMPHW
Galligan	Ed	Environmental Health Manager	LMPHW
George	Karim	Assistant Director	KY Division of Laboratory Services
Glasscock	Carol	<u>Laboratory Technologist</u>	LMPHW
Harrison	Kathy	Director of Communications& Community Relations	Mayor's Healthy Hometown Movement
Hill	Julie	Lab Director-Norton Brownsboro Hospital	Norton Health Care
Hong	Amy	<u>Laboratory Technologist</u>	LMPHW
Hudson	Evette	Billing Manager	OMB Louisville Metro Government
Kaforski	Gerald	Quality Improvement	LMPHW
Impellizzeri	Kim	Laboratory Manager	University of Louisville Hospital
Lester	David	Managing Director	MicroBac Laboratories Inco.
Lindauer	Greg	Nurse	LMPHW-TB Clinic
Maiorella	Cindy	Community Health Nurse Supervisor	LMPHW-Specialty Clinic
Mathis	Michael	<u>Laboratory Assistant</u>	LMPHW

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Meehan	Deborah	CDC/KY State STD Coordinator	State Programs (STD)
Mendel	Connie	<u>Environmental Health Administrator</u>	LMPHW
Moore	Jon	Fiscal Administrator	OMB Louisville Metro Government
Moyer	Sarah	Medical Director	LMPHW
Mullins	Ursula	Performance Coach	Office of the Mayor
Murphy	Maura	<u>Laboratory Technologist</u>	LMPHW
Nixon	Gwen	Laboratory Tech/Gen Supervisor	LMPHW
Pallum	Haritha	Epidemiologist	LMPHW
Ransom	Rochelle	<u>Laboratory Technologist</u>	LMPHW
Saad	Faye	Director	LMPHW Office of Policy, Planning and Eval
Santisteban	Ian	<u>Laboratory Technologist</u>	LMPHW-Specialty Clinic
Schleck	Alison	Environmental Health Specialist	LMPHW
Self	David	Director of Safety and Env Services	JCPS
Smith	Jimmy	Systems Analyst	LMPHW Information Technology
Snyder	James	Professor/Director, Microbiology	U of L Dept Path and Lab Medicine; Uof L
Song	Rengao	Manager of Water Quality	Louisville Water Company
Tully	Mike	Manager	Louisville Metro Emergency Medical Service
Velten	Erik	<u>Health and Safety Officer</u>	LMPD
Wang	Jack	Director of Water Quality and Production	Louisville Water Company
Wardrip	Nina	Lab Director	Baptist Health Louisville
Weakly-Jones	Barbara	Jefferson County Coroner	Jefferson County
Wolf	Leslie	Laboratory Technical Director	LMPHW

e. List of Abbreviations

AFB: Acid Fast Bacillus
AIHA: American Industrial Hygiene Association
APHL: Association of Public Health Laboratories
CAP: College of American Pathologists
CDC: Centers for Disease Control and Prevention
CLIA: Clinical Laboratory Improvement Amendments
CMS: Centers for Medicare and Medicaid Services
COOP: Continuity of Operations Plan
EPA: Environmental Protection Agency
EMS: Emergency Medical Services
EOC: Emergency Operations Center
FDA: Food and Drug Administration
FERPA: Family Education Rights and Privacy Act
HIPAA: Health Insurance Portability and Accountability Act
ICS: Incident Command System
IRB: Institutional Review Board
JADAC: Jefferson Alcohol and Drug Abuse Center
JCPS: Jefferson County Public School System
KY DLS: Kentucky Division of Consolidated Laboratory Services
LDT: Laboratory Developed Test
LMPHW: Louisville Metro Public Health and Wellness
L-SIP: Laboratory System Improvement Program
MORE: Methadone/Opiate Rehabilitation and Education
NPHSP: National Public Health Performance Standards Program
TARC: Transit Authority of River City
TAT: Turn-around Time
TB: *Mycobacterium tuberculosis*
TJC: The Joint Commission
USDA: United States Department of Agriculture
U of L: University of Louisville
UK: University of Kentucky