



# LABORATORY SYSTEM IMPROVEMENT PROGRAM

Performance Measurement Tool for  
Local Public Health Laboratory Systems



Developed by the Association of Public Health Laboratories  
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The Association of Public Health Laboratories (APHL) is a national non-profit organization dedicated to working with members to strengthen governmental laboratories that perform testing of public health significance. By promoting effective programs and public policy, APHL strives to provide member laboratories with the resources and infrastructure needed to protect the health of US residents and to prevent and control disease globally.

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## ABOUT THE TOOL:

### PLEASE NOTE:

Many important terms are defined in the accompanying Glossary. Terms included in the Glossary are underlined throughout this instrument to assist you during the assessment.

The Laboratory System Improvement Program Performance Measurement Tool is based on the Eleven Core Functions and Capabilities of Public Health Laboratories<sup>1</sup> and is designed within the framework of the Ten Essential Public Health Services.<sup>2</sup> (The former were developed through the Association of Public Health Laboratories and have been used since 2002. The latter were developed through a national collaborative process and have been in use since 1994.) The Essential Services are the basis for the National Public Health Performance Standards Program tools, used for state and local public health systems and for local Boards of Health.

The initial version of the tool was developed by public health laboratory experts and partners, implemented in 2007, and used for 26 public health laboratory system assessments. As a part of internal continuous quality improvement, a workgroup of previous users who were experienced with the assessment process utilized evaluations from previous assessments and their experience to update and refine the tool. The instrument is intended for measuring performance by assessing state and local public health laboratory systems. It was not designed to assess solely the performance of state and local laboratories.

## ABOUT THE TOOL: (CONTINUED)

The Local Public Health Laboratory System (LPH Laboratory System) consists of all the participants in laboratory testing, including those who initiate testing, those performing the testing, and those who ultimately use the test results. It is HIGHLY recommended that you refer to the User's Guide before beginning use of this instrument for a more complete definition of the LPH Laboratory System, as understanding the concept of the System is of core importance to the assessment process.

LPH Laboratory System performance relative to each of the Essential Services is measured through one or more Key Ideas, each of which includes a Model Standard that describes aspects of high level performance for local public health laboratory systems. The components of each Model Standard are termed "Key Ideas." Laboratory system performance related to each Model Standard is addressed through a series of Points for Discussion for each Key Idea.

## USING THE TOOL:

### **APPROACH:**

The assessment of an LPH Laboratory System is best completed in one day using breakout groups. Consult the L-SIP User's Guide for ideas to assist in deciding which stakeholders to include and how to plan and structure an assessment. A number of other important aids are found in this User's Guide as well.

### **USE OF FACILITATORS AND THEME TAKERS:**

It is strongly recommended that at least three facilitators be used to guide the process on the day of the assessment. It is also recommended that the facilitators be “system neutral”—that is, not employed by the local laboratory. This helps assure neutrality and minimize assessment bias. It is also recommended that a “theme taker” be included for each Essential Service assessment. The suggested responsibilities of theme takers are described in the next section. More information is provided in the L-SIP User's Guide.

### **BEGINNING THE ASSESSMENT:**

The facilitator will guide participants through a conversation about the Essential Services, Model Standards, Objectives, Points for Discussion, and Key Ideas. The purpose of the Points for Discussion is to guide a brief discussion among the participants regarding who is performing the activities referenced and to what degree the questions are satisfied by the work currently being done by partners within the LPH Laboratory System. Each of the Points for Discussion following the Key Idea is intended to represent essential activities that the system should be performing in that area.

## USING THE TOOL:

### (CONTINUED)

Individuals in the group who have firsthand experience relative to one or more of the questions should share their perspectives and experiences. When the group identifies an issue related to the Key Idea or to one or more of the questions that requires deeper dialogue, the facilitator should ask the theme taker to capture that idea as a “parking lot” issue on the form provided for future consideration, and then move the group on to the next discussion. Many of the Key Ideas are accompanied by a list of “examples,” which are intended to add further clarity to the Key Idea and do not require a full discussion.

#### “SCORING” THE RESPONSE:

Once the questions for a Key Idea have been discussed, the facilitator should move the discussion to closure. The facilitator should ask the group how they would rate performance by the LPH Laboratory System relative to the Key Idea and the Points for Discussion. The performance options to be considered are:

|      |         |          |             |         |
|------|---------|----------|-------------|---------|
| NONE | MINIMAL | MODERATE | SIGNIFICANT | OPTIMAL |
|------|---------|----------|-------------|---------|

It is the facilitator’s responsibility to bring the group to general agreement on one of the ratings listed above for each Key Idea (but not each individual question). One method used is to ask for a “straw vote” of individuals in the group, who vote by holding up a card with the color that matches that of the system performance rating

## USING THE TOOL:

## (CONTINUED)

(refer to the rating definitions below). If the resulting vote reflects significant diversity of opinion, the facilitator may ask for a few members of the group who showed high and low rating cards to explain their vote. The discussion often helps lead to agreement. Additional “re-votes” can be used to determine if the group is coalescing around a rating.

When general agreement is reached, the theme taker should record the rating on the instrument scoring matrix located after the Points for Discussion and refer to the L-SIP User’s Guide or the scoring tool in the first tab labeled “Instructions.” The facilitator should guide the group through the scoring process, using the following definitions of the rating options:

| NONE               | MINIMAL                                                                                                                  | MODERATE | SIGNIFICANT | OPTIMAL |
|--------------------|--------------------------------------------------------------------------------------------------------------------------|----------|-------------|---------|
| <b>NONE</b>        | 0% or absolutely none of the performance described is met within the public health laboratory system.                    |          |             |         |
| <b>MINIMAL</b>     | Greater than zero, but no more than 25%, of the performance described is met within the public health laboratory system. |          |             |         |
| <b>MODERATE</b>    | Greater than 25%, but no more than 50%, of the performance described is met within the public health laboratory system.  |          |             |         |
| <b>SIGNIFICANT</b> | Greater than 50%, but no more than 75%, of the performance described is met within the public health laboratory system.  |          |             |         |
| <b>OPTIMAL</b>     | Greater than 75% of the performance described is met within the public health laboratory system.                         |          |             |         |

## USING THE TOOL:

## (CONTINUED)

### **IMPORTANT NEXT STEPS:**

After the last Key Idea for each Essential Service is completed, the facilitator should lead a brief discussion of the top two to three “next steps” that System partners might consider taking to strengthen system performance in the overall Essential Service. A ranking by priority regarding the importance of each of the next steps is also suggested. The facilitator should help the group determine a unified response.

The responses will subsequently help identify priorities for system improvement projects. The theme taker should note the next steps selected by participants and, if possible, the name of contact persons responsible for convening a first meeting to begin addressing the respective issues.

### **SCORING SPREADSHEET:**

Provided with the L-SIP assessment kit is an Excel spreadsheet. Scores can be entered on the spreadsheet during the assessment, or sometime later. Refer to the User’s Guide or the scoring tool in the first tab, labeled “Instructions.”

### **FINAL NOTE:**

It is important that you retain worksheets that document the assessment, including scores, “Next Steps,” discussion notes, and parking lot records. These will be invaluable as you begin developing an improvement project with your partners and stakeholders to address areas of system performance needing improvement.

## REFERENCES

1. *Core Functions and Capabilities of State Public Health Laboratories: A Report of the Association of Public Health Laboratories* (CDC 20sep02).
2. Public Health Functions Steering Committee: *Public Health in America*. July 1994.
3. Inhorn SL, Astles JR, Gradus S, Malmberg V, Snippes PM, Wilcke BW Jr, White VA. 2010. The State Public Health Laboratory System. *Public Health Rep.* May-Jun;125 Suppl 2:4-17.
4. Wilson ML, Gradus S, Zimmerman SJ. 2010. The role of local public health laboratories. *Public Health Rep.* May-Jun;125 Suppl 2:118-22.

## ESSENTIAL SERVICE #1: MONITOR HEALTH STATUS TO IDENTIFY COMMUNITY HEALTH PROBLEMS

### INTENT:

Partners in the LPH Laboratory System are involved in the monitoring of health status of communities and contribute to the identification of community health problems. Partners in the system participate in supporting health surveillance programs by generating accurate and timely laboratory data in all areas of public health (i.e., communicable disease, metabolic and chronic disease, congenital disorders, and environmental exposures). Laboratory data is communicated rapidly and efficiently to all appropriate partners.

### EXAMPLES OF SYSTEM PARTNER CONTRIBUTIONS TO THIS ESSENTIAL SERVICE

|                                                |                             |
|------------------------------------------------|-----------------------------|
| Chronic disease monitoring                     | Health information exchange |
| Infectious disease investigating and reporting | Laboratory testing          |
| Environmental exposure monitoring              | Specimen/isolate submission |
| Electronic medical record implementation       |                             |

### Model Standard 1.1: Monitoring of Community Health Status

The LPH Laboratory System generates surveillance information and supports others in monitoring health status and identifying health problems in the community.

### MEASURABLE OBJECTIVES (SAMPLES):

- System partners conduct regular meetings to evaluate data regarding sentinel health events.
- Partners participate in after-action reports of major outbreaks and environmental incidents.
- Partners' roles and responsibilities in outbreaks are clearly defined.
- Specimens are monitored for quality assurance (i.e., specimen integrity, receipt times).
- Continuity of Operations Plan (COOP) includes one or more Memoranda of Understanding (MOU) with other facilities.

## 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.

### EXAMPLES:

- Processes are in place for the public health laboratory (PHL) to obtain isolates/specimens for surveillance testing in a timely manner.
- Pulsed-field gel electrophoresis (PFGE) is performed by the public health laboratory in real-time.
- The veterinary and agriculture laboratories collaborate in outbreaks with the system partners when appropriate.
- The LPH Laboratory System provides safe drinking water, recreational water, and biomonitoring testing.

### Points for Discussion:

Does the LPH Laboratory System:

- Participate in a sentinel surveillance system for infectious diseases and environmental events of public health significance?
- Have multiple methods of gathering laboratory data from public and private laboratories?
- Monitor for foodborne outbreaks through collaboration among system partners such as epidemiologists, clinical and public health laboratorians, and government agency representatives?
- Translate data into useful information to coordinate with epidemiologists in determining appropriate action, such as looking for disease clusters, calculating disease incidence, monitoring for safe drinking water, promoting food safety and clean air, and examining for the presence of toxins?

### Evaluation:

| 1.1.1                                                                                                           | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## KEY IDEA 1.1.2

The LPH Laboratory System supports the monitoring of chronic disease trends by participating in state and federal surveillance systems.

### EXAMPLES:

- Chronic disease epidemiologists collaborate with laboratories conducting testing for heart disease, diabetes, and other chronic diseases.
- Healthcare personnel use data provided by the LPH Laboratory System to educate on how to avoid chronic diseases.

### Points for Discussion:

Does the LPH Laboratory System:

- Assure that the breadth and scope of chronic disease testing and surveillance is understood by members of the LPH Laboratory System?
- Support chronic disease prevention strategies, such as for heart disease, diabetes and cancer?
- Translate data into useful information in coordination with state epidemiologists to determine appropriate action, including looking for clusters of chronic disease and calculating disease incidence?
- Provide aggregate surveillance information about chronic diseases to partners and stakeholders?

### Evaluation:

| 1.1.2                                                                                                           | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## Model Standard 1.2: Surveillance Information Systems

The LPH Laboratory System generates information and supports others in identifying problems and monitoring health status in the community and state.

### **MEASURABLE OBJECTIVES (SAMPLES):**

- A list of data information systems used by system partners is compiled.
- An assessment of data systems is conducted annually.
- Exercises are conducted among system partners to test the 2-way information exchange.

## 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.

### EXAMPLES:

- LIMS are capable of assimilating information parallel with the flow of specimen processing and laboratory reporting which covers pre-analytical and post-analytical systems.
- The LPHL LIMS interfaces with epidemiologists and other appropriate health information systems in the System.
- IT systems are in place assuring quality, including access to adequate IT staff.

### Points for Discussion:

Does the LPH Laboratory System:

- Have available highly integrated and comprehensive information systems (i.e., Laboratory Information System - LIMS)?
- Have information technology (IT) systems with a centralized database with capability to electronically share laboratory results and to utilize nationally recognized data standards (e.g., HL7, LOINC, SNOMED, ASC ANSI X12)?
- Have IT systems that support prompt electronic laboratory reporting and real-time data exchange among relevant system partners?
- Have IT systems that meet the requirements of security and confidentiality (e.g., server rooms, cyber security, access, administrative, etc.)?
- Have the capability of 2-way information exchange (i.e., test ordering, result reporting, disease reporting, health information exchange, etc.)?

### Evaluation:

| 1.2.1                                                                                                           | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## KEY IDEA 1.2.2

The LPH Laboratory System partners collaborate to strengthen electronic surveillance systems.

### EXAMPLES:

- System partners contribute to national infectious disease systems such as: FoodNet, eLEXNET, ArboNet, PulseNet, NREVSS, and CaliciNet.
- System partners contribute to national environmental health efforts such as: biomonitoring, the Environmental Public Health Tracking Program, the Safe Drinking Water Information System (SDWIS).

### Points for Discussion:

Does the LPH Laboratory System:

- Have fiscal resources for updated hardware and software?
- Regularly evaluate needs for data systems?
- Regularly evaluate if the data being provided contributes to effective monitoring of health status?
- Partner with a variety of organizations to assure availability of a system that links the environmental testing results to a reporting system?

### Evaluation:

| 1.2.2                                                                                                           | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## ESSENTIAL SERVICE #1 NEXT STEPS —

List top 2-3 possible next steps and rate as to importance (immediate, high, medium, low) and a contact person for each to address at a first meeting.

| NEXT STEPS | IMPORTANCE | SUGGESTED ACTIVITIES |
|------------|------------|----------------------|
|            |            |                      |
|            |            |                      |
|            |            |                      |

## ESSENTIAL SERVICE #2: DIAGNOSE AND INVESTIGATE HEALTH PROBLEMS AND HEALTH HAZARDS IN THE COMMUNITY

### INTENT:

Partners in the LPH Laboratory System provide laboratory services of the highest quality, consistent with the needs of the state and communities. Members of the System collaborate through networks to support responses to public health emergencies, and have the capacity, authority and necessary arrangements in place to assure rapid response to such emergencies.

### EXAMPLES OF SYSTEM PARTNER CONTRIBUTIONS TO THIS ESSENTIAL SERVICE

Clinical services  
Investigational outcomes  
Surveillance activities  
Participation in drills and exercises

Communication pathways  
Emergency response networks  
Submission of clinical isolates

### Model Standard 2.1: Appropriate and effective high quality testing

The system assures the availability of appropriate laboratory testing of the highest level of quality to support timely diagnosis and investigation of all health problems and hazards within its capability and has identified additional resources that may be called upon as needed.

### MEASURABLE OBJECTIVES (SAMPLES):

- Have a mechanism to evaluate the quality of system services that meets related standards or regulations.
- Sufficient capacity is available in the system to assure laboratory response to a significant emergency.
- Outbreak investigations are conducted through a partnership approach to assure needed expertise.

## 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.

### EXAMPLES:

- The System complies with the FDA and CLIA regulations governing the development, validation and use of laboratory-developed tests (LDTs).
- Knowledge of users on test limitations is assured (i.e., sensitivity, specificity).
- Compliance and regulatory inspection results are available (proof of certificate of compliance or accreditation).
- The System complies with the disease reporting requirements.

## Points for Discussion:

Does the LPH Laboratory System:

- Possess scientific expertise to assure the highest needed level of appropriate quality testing?
- Use its combined resources efficiently, including staff, equipment, technology, methodology, and supplies to respond to health problems and hazards?
- Assure the necessary system capacity with the appropriate level of containment (e.g., biosafety Level 3 capacity, lead containers for radioactivity, etc.)?
- Have 2-way communication with customers and stakeholders to support diagnosis and investigations?
- Support public health investigations through participation of epidemiologists, laboratorians and other system partners?

## Evaluation:

| 2.1.1                                                                                                           | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

## Parking Lot Issues:

## 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.

### EXAMPLES:

- Implementation of the Incident Command System (ICS) is standard practice.
- COOP, surge capacity, emergency communication plans, and other emergency plans are aligned with the local emergency plan.
- Preliminary assessment of unknown samples is conducted in a triage area using defined processes.
- Alert messages (Health Alert Network messaging) and/or other incident management communication are used.
- To facilitate a rapid response in emergencies, the necessary agreements, contracts and intrastate compacts to expedite purchases, service contracts, shared personnel, facilities and supplies, including stockpiled reagents are in place.

### Points for Discussion:

Does the LPH Laboratory System:

- Have the ability to provide for testing unknown samples that may contain potential biological, radiological, or chemical threats, including a process that provides for laboratory specimen tracking, results reporting, coordinated interpretation and use of laboratory information?
- Understand the Laboratory Response Networks (biological, chemical, radiological, food, other) and individual roles in public health preparedness and response?
- Include a representative cross-section of LPH Laboratory System members in the development and definition of partner roles, Continuity of Operations Plan (COOP), preparedness, emergency communication, surge capacity plans, drills and exercises?

### Evaluation:

| 2.1.2                                                                                                           | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## ESSENTIAL SERVICE #2 NEXT STEPS:

List top 2-3 possible next steps and rate as to importance (immediate, high, medium, low) and a contact person for each to address at a first meeting.

| NEXT STEPS | IMPORTANCE | SUGGESTED ACTIVITIES |
|------------|------------|----------------------|
|            |            |                      |
|            |            |                      |
|            |            |                      |

## ESSENTIAL SERVICE #3: INFORM, EDUCATE, AND EMPOWER PEOPLE ABOUT HEALTH ISSUES

### INTENT:

Partners of the LPH Laboratory System are actively engaged in creating and distributing accurate and relevant information about laboratory issues to health partners (e.g., providers, physicians) and non-health partners (e.g., public, policy makers). System partners participate in outreach through education and communication to identify needs and share appropriate information. Partnerships exist to empower communities to initiate programs in response to health problems.

### EXAMPLES OF SYSTEM PARTNER CONTRIBUTIONS TO THIS ESSENTIAL SERVICE

Clinical services  
Identification of laboratory issues  
Requests for laboratory input & expertise

Participation in development of information  
Educational opportunities

### Model Standard 3.1: Outreach to Partners

The LPH Laboratory System provides targeted laboratory information and education opportunities to appropriate health and community partners.

### MEASURABLE OBJECTIVES (SAMPLES):

- A defined process is established with partners to communicate information to a variety of stakeholders.
- The process for communicating with partners is monitored for timeliness and consistency.
- There is a mechanism in place that tracks and supports feedback among partners to ensure consistent, effective and useful educational activities.

## 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.

### EXAMPLES:

- Partners are provided with tools and resources to understand and utilize the public health laboratory services.
- Information-sharing occurs in both everyday and in emergency situations.
- The public is provided with information regarding the use and interpretation of home testing kits to support quality test results.

### Points for Discussion:

Does the LPH Laboratory System:

- Have a mechanism to assure consistent communication among partners, including an authorization process for the release of information where required?
- Share information with professional societies and partner organizations?
- Conduct outreach to partners to provide resources and information about laboratory services?
- Have systems in place to distribute public health laboratory information to community organizations?
- Assure consistency in communication and information between health partners and the community stakeholders?

### Evaluation:

| 3.1.1                                                                                                           | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## KEY IDEA 3.1.2

The LPH Laboratory System creates and provides education opportunities to health and non-health community partners.

### EXAMPLES:

- There is a mechanism for identifying and developing education presentations for public and health partners.
- Messages to health and non-health partners contain applicable and accurate data.
- Publications are available to partners with updated laboratory information.

### Points for Discussion:

Does the LPH Laboratory System:

- Educate public health officials and state-level advocates, such as government leaders, legislators, and teachers about laboratory system issues?
- Offer community education opportunities that are broad-based and include multi-cultural, rural and urban perspectives?
- Use multiple information modes (e.g., website, flyers, social media/marketing, etc.) and levels of complexity (e.g., reading levels, technical level, multiple languages) for educating partners and the public?
- Work proactively with media to educate partners about laboratory issues and the LPH Laboratory System?
- Conduct outreach to the general public?

### Evaluation:

| 3.1.2                                                                                                           | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## Model Standard 3.2: Empower Partners

The LPH Laboratory System empowers health and non-health partners through relationship-building.

### **MEASURABLE OBJECTIVES (SAMPLES):**

- Tracking of relationship-building activities is maintained.
- Tracking of community partner education activities addressing important community health issues is maintained.
- Partnership networks are in place.

## KEY IDEA 3.2.1

Relationship-building opportunities are employed to empower community partners.

### EXAMPLES:

- Community partners can address important issues through education and relationships.
- Participation in community service organizations' activities is evident, e.g., Relay for Life, health fairs.
- Good laboratory practices are promoted through collaboration between the LPH Laboratory System and community partners.

### Points for Discussion:

Does the LPH Laboratory System:

- Create relationships with service organizations, advocacy groups, and other key community members?
- Generate opportunities for members of the public health system to learn about the partners and their business operations?
- Support the development of opportunities for members of non-health partners to learn about the system partners and their business associations?
- Work with community partners to identify strategies to enable the public to use appropriate laboratory services?

### Evaluation:

| 3.2.1                                                                                                           | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## ESSENTIAL SERVICE #3 NEXT STEPS –

List top 2-3 possible next steps and rate as to importance (immediate, high, medium, low) and a contact person for each to address at a first meeting.

| NEXT STEPS | IMPORTANCE | SUGGESTED ACTIVITIES |
|------------|------------|----------------------|
|            |            |                      |
|            |            |                      |
|            |            |                      |

## ESSENTIAL SERVICE #4: MOBILIZE COMMUNITY PARTNERSHIPS TO IDENTIFY AND SOLVE HEALTH PROBLEMS

### INTENT:

The LPH Laboratory System leads the development of the LPH Laboratory System. Members of the System create and maintain a network of partnerships with stakeholders to identify and solve health problems related to the laboratory system. System members communicate regularly with each other to foster collaboration and share resources to support the mobilization of partnerships in response to community health issues.

### EXAMPLES OF SYSTEM PARTNER CONTRIBUTIONS TO THIS ESSENTIAL SERVICE

Clinical services  
Leadership  
Collaboration

Environmental awareness  
Multicultural Awareness

### Model Standard 4.1: Partnership Development

Organizations within the LPH Laboratory System demonstrate collaborative relationships with each other.

### MEASURABLE OBJECTIVES (SAMPLES):

- The System roles and responsibilities are defined for all members of the System.
- The System has an ongoing monitoring process to measure and evaluate the effectiveness of partner collaborations.
- A system is in place to respond to feedback from partners.

## KEY IDEA 4.1.1

Partners in the LPH Laboratory System develop and maintain relationships to formalize and sustain an effective system.

### EXAMPLES:

- Agreements (formal and/or informal) are in place to delineate partner responsibilities.
- Partnerships are sustained financially, politically and programmatically.
- Depending on state rules of conduct, the system may create a steering committee, advisory or similar group that meets regularly to provide feedback and guidance to the system.

### Points for Discussion:

Does the LPH Laboratory System:

- Convene partners to formalize the System?
- Define the roles and responsibilities of member organizations within the LPH Laboratory System?
- Have a process for identifying key constituents and building partnerships among member organizations?
- Address the need for shared organizational mission, vision, and values?

### Evaluation:

| 4.1.1                                                                                                           | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## Model Standard 4.2: Communication

The LPH Laboratory System is structured to support regular and effective communication.

### **MEASURABLE OBJECTIVES (SAMPLES):**

- Members of the LPH Laboratory System have communication plans for their respective organizations.
- The LPH Laboratory System communication plan is tested, evaluated and updated on a regular basis.
- 24/7 contact information for all partners is collected, maintained and available to all system partners.

## KEY IDEA 4.2.1

LPH Laboratory System members communicate effectively in regular, timely, and effective ways to support collaboration.

### EXAMPLES:

- An integrated or coordinated, regularly updated website is in place for the System.
- System members have the capacity to generate blast faxes or other simultaneous communication methods.
- The LPH Laboratory System members produce and distribute a newsletter.
- The LPH Laboratory System works with technical experts and internal partners through the public information officer to inform the public.

### Points for Discussion:

Does the LPH Laboratory System:

- Share member communication plans and work towards coordination of plans among system members?
- Provide information, both routine and emergency, to partners in a coordinated fashion?
- Have a mechanism in place that supports feedback among partners?
- Use multiple and alternative methods to effectively communicate LPH Laboratory System messages to ensure the public is well informed about public health issues?
- Have redundant communication systems in place between partners?

### Evaluation:

| 4.2.1                                                                                                           | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

### Model Standard 4.3: Resources

The LPH Laboratory System has adequate resources to solve health issues.

#### **MEASURABLE OBJECTIVES (SAMPLES):**

- System partners share resources in obtaining grants and, through sharing personnel, funding and other resources.
- A mechanism exists to share feedback among partners.

## 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.

### EXAMPLES:

- System partners collaborate when applying for cooperative grant funds (or other funding sources) and work with other partners within their organizations.
- The resource needs of system partners are defined.
- System partners identify means and opportunities for sharing staff, equipment and/or other resources.

### Points for Discussion:

Does the LPH Laboratory System:

- Allocate time and resources to build and maintain relationships with partners?
- Share resources (funding, personnel, equipment, etc.) to increase effectiveness?
- Collaborate in seeking and developing new resources to strengthen the system?
- Develop plans that include a systematic approach for evaluating effectiveness of identifying needs, measuring outcomes, and obtaining funding?

### Evaluation:

| 4.3.1                                                                                                           | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## ESSENTIAL SERVICE #4 NEXT STEPS –

List top 2-3 possible next steps and rate as to importance (immediate, high, medium, low) and a contact person for each to address at a first meeting.

| NEXT STEPS | IMPORTANCE | SUGGESTED ACTIVITIES |
|------------|------------|----------------------|
|            |            |                      |
|            |            |                      |
|            |            |                      |

## ESSENTIAL SERVICE #5: DEVELOP POLICIES AND PLANS THAT SUPPORT INDIVIDUAL AND COMMUNITY HEALTH EFFORTS

### INTENT:

The Local Public Health Laboratory and its system partners provide expertise, at all levels of government, in policy development related to laboratory services. Health policy is based on adequate laboratory data, scientifically sound policy options, and policies that are consistent across jurisdictions. The System disseminates new and revised policy to all appropriate community partners. Policies and plans that affect the LPH Laboratory System are reviewed and updated on a regular basis.

### EXAMPLES OF SYSTEM PARTNER CONTRIBUTIONS TO THIS ESSENTIAL SERVICE

Collaboration  
Data analysis and interpretation  
Needs assessment  
Policy development

Communication  
Evaluation  
Planning

### Model Standard 5.1: Partnerships in Public Health Planning

The LPH Laboratory System assures broad involvement in developing plans and policies addressing priority health issues.

### MEASURABLE OBJECTIVES (SAMPLES):

- Agencies work together to address Clinical Laboratory Improvement Amendments (CLIA) requirements.
- Agencies work together to address Safe Drinking Water Information System (SDWIS) reporting requirements.
- Plans and policies are reviewed at least annually by system partners.

## 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.

### EXAMPLES:

- System partners are present during policy proposal discussions.
- Communication between partners garners insight to the needs of each entity.
- System partners collaborate to conduct community assessments to define policy needs.

### Points for Discussion:

Does the LPH Laboratory System:

- Consider input from key partners, organizations, and agencies in policy development and planning?
- Have policies that are consistent with those of other state agencies (e.g., health, environment, agriculture, etc.)?
- Work with state and local officials to prioritize efforts to address pressing health needs of the community?
- Integrate laboratory issues, including emergency response, into program planning?
- Develop policies and plans based proactively on community needs as determined through formal assessment?

### Evaluation:

| 5.1.1                                                                                                           | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## Model Standard 5.2: Role in Laboratory-Related Policy Making

The LPH Laboratory System contributes expertise to inform and influence policy based on science and data.

### **MEASURABLE OBJECTIVES (SAMPLES):**

- Laboratory policies have been determined to be consistent with other applicable policies, regulations and plans.
- Proposed policy is routinely reviewed for consistency with applicable scientific evidence.
- Involvement by laboratory system partners in policy development is documented.

## 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.

### EXAMPLES:

- System partners meet regularly with legislators and key policy personnel to discuss upcoming legislation.
- System partners are represented when policies and regulations are being reviewed.
- Strategic planning meetings and outcomes use laboratory data for policy making.

### Points for Discussion:

Does the LPH Laboratory System:

- Promote state policies that are consistent with federal policies, regulations, and plans?
- Contribute to policy development and planning at all levels by promoting scientifically sound policy options?
- Have sufficient and appropriate laboratory data collected and analyzed to inform the policy making process?
- Work with appropriate officials using evidence-based approaches and analysis to inform policies?
- Have opportunities to provide input when policies and plans that affect the system are proposed or updated?

### Evaluation:

| 5.2.1                                                                                                           | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## Model Standard 5.3: Dissemination and Evaluation

The LPH Laboratory System disseminates and evaluates current plans and policies.

### **MEASURABLE OBJECTIVES (SAMPLES):**

- System partners routinely collaborate to review and disseminate plans and policies.
- Feedback and evaluation information is maintained for future policy planning and revisions.
- The distribution of plans and policies is monitored to assure timely availability to system partners and others.

## KEY IDEA 5.3.1

The plans and policies that affect the LPH Laboratory System are routinely evaluated, updated and disseminated.

### EXAMPLES:

- Announcements of new or updated policies and plans are conveyed to each partner when appropriate.
- Continuity of Operations Plans and Emergency Operations Plans are reviewed and updated regularly.

### Points for Discussion:

Does the LPH Laboratory System:

- Have a mechanism in place to periodically monitor the effectiveness of policies and plans?
- Regularly collect feedback from partners and others regarding plans and policies?
- Routinely disseminate policies and plans, both new and revised, to all partners?
- Retire and archive out-of-date policies and plans?
- Develop strategies to inform the affected communities and organizations of relevant laboratory system plans and policies?

### Evaluation:

| 5.3.1                                                                                                           | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## ESSENTIAL SERVICE #5 NEXT STEPS –

List top 2-3 possible next steps and rate as to importance (immediate, high, medium, low) and a contact person for each to address at a first meeting.

| NEXT STEPS | IMPORTANCE | SUGGESTED ACTIVITIES |
|------------|------------|----------------------|
|            |            |                      |
|            |            |                      |
|            |            |                      |

## ESSENTIAL SERVICE #6: ENFORCE LAWS AND REGULATIONS THAT PROTECT HEALTH AND ENSURE SAFETY

### INTENT:

The LPH Laboratory System assures that all laboratory-related laws and regulations that protect health and ensure safety are enforced. System members review and recommend revisions of applicable laws and regulations on a regular basis. System members encourage compliance with the laws and regulations and support necessary enforcement functions.

### EXAMPLES OF SYSTEM PARTNER CONTRIBUTIONS TO THIS ESSENTIAL SERVICE

Chemical exposure prevention  
Communications  
Legal advice  
Restaurant inspections

Enforcement activities  
Multicultural Awareness  
Regulation review

### Model Standard 6.1: Laws and Regulations

The LPH Laboratory System regularly and periodically reviews, recommends revisions to, and promotes compliance with city and county ordinances and regulations pertaining to laboratory practice.

### MEASURABLE OBJECTIVES (SAMPLES):

- The LPH Laboratory System members have access to current applicable laws and regulations.
- There are mechanisms and opportunities for the laboratory system to share expertise and make recommendations regarding revision of laws and regulations.
- The LPH Laboratory System encourages and promotes compliance by all laboratories in the system with all applicable city and county ordinances and regulations.

## KEY IDEA 6.1.1

The LPH Laboratory System is actively involved in the review and revision of laws and regulations pertaining to laboratory practice.

### EXAMPLES:

- Appropriate members of the LPH Laboratory System participate in reportable diseases and required isolate submissions.
- Members of the System have access to all applicable laws and regulations on an as-needed basis.

### Points for Discussion:

Does the LPH Laboratory System:

- Review laboratory-related laws and regulations periodically?
- Provide recommendations reflecting expertise regarding the revision of regulations to legislators and other policy makers?
- Evaluate the appropriateness of existing and proposed laws and regulations?

### Evaluation:

| 6.1.1                                                                                                           | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## 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.

### EXAMPLES:

- The System provides members with consultations and copies of standard operating procedures.
- The System maintains regulatory compliance among system laboratories.

### Points for Discussion:

Does the LPH Laboratory System:

- Have staff whose primary responsibility includes promoting quality systems that meet regulatory standards?
- Have training programs or other resources available for organizations that have difficulty understanding or complying with laws and regulations?
- Work with other government agencies to improve compliance?

### Evaluation:

| 6.1.2                                                                                                           | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## ESSENTIAL SERVICE #6 NEXT STEPS –

List top 2-3 possible next steps and rate as to importance (immediate, high, medium, low) and a contact person for each to address at a first meeting.

| NEXT STEPS | IMPORTANCE | SUGGESTED ACTIVITIES |
|------------|------------|----------------------|
|            |            |                      |
|            |            |                      |
|            |            |                      |

## ESSENTIAL SERVICE #7:

LINK PEOPLE TO NEEDED PERSONAL HEALTH SERVICES AND ASSURE THE PROVISION OF HEALTHCARE WHEN OTHERWISE UNAVAILABLE

### INTENT:

Partners of the LPH Laboratory System work to assure that people in the local jurisdiction have access to laboratory services, especially when services are otherwise unavailable. To accomplish this, local jurisdiction members establish processes to identify laboratory services that are needed, and collaborate within the system to fill any identified gaps.

### EXAMPLES OF SYSTEM PARTNER CONTRIBUTIONS TO THIS ESSENTIAL SERVICE

Clinical services  
Food safety  
Response to emergencies  
Water testing

Transportation of laboratory specimens  
Policy making  
Resource development

### Model Standard 7.1: Provision of Laboratory Services

The LPH Laboratory System collaborates to assure access to laboratory services.

### MEASUREABLE OBJECTIVES (SAMPLES):

- An up-to-date list of laboratory services is available.
- Necessary support systems (sample transport, laboratory consultative services, etc.) are in place.
- Turnaround-times are established, and regularly monitored for effectiveness.

## KEY IDEA 7.1.1

The LPH Laboratory System identifies laboratory service needs and collaborates to fill gaps.

### EXAMPLES:

- After-hours protocols are in place and accessible.
- Diagnostic laboratories partner with each other and with state and local public health laboratories to provide accessible services.
- Packaging and Shipping training is available within or outside of the LPH Laboratory System for specimen transport.

### Points for Discussion:

Does the LPH Laboratory System:

- Assess availability, quality, accessibility and timeliness of laboratory services?
- Make projections of future capacity needs with partners?
- Collaborate to seek resources to fill gaps in the provision of laboratory services?
- Coordinate the transport of specimens and samples to the laboratory?

### Evaluation:

| 7.1.1                                                                                                           | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## KEY IDEA 7.1.2

The LPH Laboratory System provides timely and easily accessed quality services across the jurisdiction.

### EXAMPLES:

- Information about laboratory testing services is regularly updated.
- Test menus are available on laboratory websites.
- For critical public health tests that are not available at the local public health laboratory or within the LPH Laboratory System, arrangements for testing are made with other system partners.

### Points for Discussion:

Does the LPH Laboratory System:

- Provide human, water, food, and veterinary testing services?
- Share information among system partners and the public about the services available?
- Have adequate services for the timely transport of specimens?
- Assure access to consultative expertise by a laboratory professional?
- Assure timely reporting of laboratory results?
- Address access to laboratory services in sparsely populated, rural, or frontier areas?

### Evaluation:

| 7.1.2                                                                                                           | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## ESSENTIAL SERVICE #7 NEXT STEPS –

List top 2-3 possible next steps and rate as to importance (immediate, high, medium, low) and a contact person for each to convene a first meeting.

| NEXT STEPS | IMPORTANCE | SUGGESTED ACTIVITIES |
|------------|------------|----------------------|
|            |            |                      |
|            |            |                      |
|            |            |                      |

## ESSENTIAL SERVICE #8: ASSURE A COMPETENT PUBLIC HEALTH AND PERSONAL HEALTHCARE WORKFORCE

### INTENT:

Partners of the LPH Laboratory System collaborate to assure that the laboratory workforce is adequate in make-up and is highly qualified to respond to all demands for laboratory service. The System promotes the consistent use of position descriptions that are based on education, experience, certification, and licensure if appropriate, for all members of the System workforce. System members regularly monitor and assess the competency and performance of their laboratory staff. Training, staff development, partner collaborations and other strategies are used to retain current staff and promote laboratory science careers.

### EXAMPLES OF SYSTEM PARTNER CONTRIBUTIONS TO THIS ESSENTIAL SERVICE

|                                                   |                                        |
|---------------------------------------------------|----------------------------------------|
| Communication                                     | Human resources                        |
| Public Information Officer                        | Performance evaluation                 |
| Laboratory regulators                             | Quality assessment activities          |
| Laboratory staff training and development program | Workforce development                  |
| School career counselors                          | and public health laboratory promotion |

### Model Standard 8.1: Defined Scope of Work and Practice

All laboratories within the LPH Laboratory System have defined position descriptions and requirements for both administrative and scientific workforce categories are defined and regularly assessed.

### MEASURABLE OBJECTIVES (SAMPLES):

- The qualifications of new hires (e.g., education, credentials and references) are verified and documented.
- Position descriptions describe the education, experience, skills, and abilities required to complete specific tasks and fulfill defined responsibilities of positions across all phases of laboratory testing.
- There is evidence of Initial Demonstration of Capability (IDC) and/or ongoing competency assessment for all employees.
- There is a written performance evaluation process in place.

## KEY IDEA 8.1.1

All laboratories within the LPH Laboratory System identify position requirements and qualifications; assess competencies; and evaluate performance for all laboratory workforce categories across the entire scope of testing.

### EXAMPLES:

- Laboratories in the system share performance appraisal systems.
- Examples of non-traditional laboratory testing might include hand-held field devices, point-of-care and CLIA-waived tests. Non-traditional settings might include physician or veterinary offices, zoos, water utilities, sewage districts, medical examiners, private industry, clinics, and mobile laboratories.

### Points for discussion:

Does the LPH Laboratory System:

- Have defined position requirements at all levels, including administration and entry-level, that are based on education, skills, and experience?
- Define the knowledge, skills, and abilities required for all phases of laboratory testing (pre-analytical, analytical and post-analytical) for each position category?
- Define requirements for personnel who perform testing in non-traditional laboratory settings?
- Regularly assess competency and evaluate performance of workers?
- Define position descriptions in place at LPH Laboratory System for both scientific and administrative position categories?

### Evaluation:

| 8.1.1                                                                                                           | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## Model Standard 8.2: Recruitment and Retention of Qualified Staff

Laboratories within the LPH Laboratory System train, attract and retain highly qualified staff.

### **MEASURABLE OBJECTIVES (SAMPLES):**

- Recognition for staff accomplishments, contributions and achievements.
- Continuous education and training opportunities exist for staff at all levels to participate in laboratory workgroups; quality improvement committees; partner collaborations; and local, state and national workgroups to improve laboratory practice.
- Recruitment strategies include outreach and the promotion of laboratory careers at career fairs, periodic visits and lecture to area colleges, high schools, mentoring students/interns/postdoc, participation in SMART/STEM activities, and in other groups of future potential laboratory workers.
- Continuous education and cross-training opportunities for staff to meet laboratory needs and stay current on advancement in technology are available.

## 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.

### EXAMPLES:

- The LPH Laboratory System uses benefits, such as flexible scheduling, to increase retention and job satisfaction.
- A defined career ladder exists within laboratory organizations to allow for staff development.
- The LPH Laboratory System supports student outreach programs, career fairs, or laboratory tours.

### Points for discussion:

Does the LPH Laboratory System:

- Use creative (out-of-box) approaches to recruit qualified new personnel?
- Support and advocate for compensation to attract and retain staff with the necessary qualifications?
- Employ creative approaches for flexible schedules/work hours for workers?
- Empower staff by supporting their participation and membership in professional organizations, training and educational opportunities for professional growth and development?

### Evaluation:

| 8.2.1                                                                                                           | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## Model Standard 8.3: Assuring a Competent Workforce

The LPH Laboratory System addresses workforce competency, promotion and availability issues.

### **MEASURABLE OBJECTIVES (SAMPLES):**

- The LPH Laboratory System actively engages in collaborations, such as internships, fellowships, rotations, or other mentoring activities.
- Programs are available to foster leadership development for future laboratory leaders.
- The LPH Laboratory System identifies gaps in technical and administrative skill sets and engage member institutes and agencies for appropriate staff development and training.

## KEY IDEA 8.3.1

The LPH Laboratory System works to assure a competent workforce by encouraging and supporting staff development through training, education, and mentoring.

### EXAMPLES:

- Education plans are shared among the partners.
- Distance learning methodologies are used.
- Opportunities are provided for staff development in areas such as state-of-the art technology, innovative leadership, management, and communication.
- The LPH Laboratory System participates in laboratory based educational training programs, such as CLS, microbiologist, etc.

### Points for discussion:

Does the LPH Laboratory System:

- Institute and document appropriate staff development activities to address identified gaps in skill sets at all levels?
- Collaborate with academia and other partners to develop and promote programs such as laboratory internships, fellowships, training programs, rotations, mentoring and job opportunities?
- Provide training opportunities to staff based on identified competency issues?
- Offer continuing education opportunities to staff and purchase proficiency challenges per regulatory mandates?

### Evaluation:

| 8.3.1                                                                                                           | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## KEY IDEA 8.3.2

The LPH Laboratory System identifies and addresses current and future workforce shortage issues.

### EXAMPLES:

- The LPH Laboratory System project staff retirements over the next five years.
- The LPH Laboratory System conducts career forums promoting laboratory science and job opportunities.
- The LPH Laboratory System partners attend job fairs to promote laboratory science careers.
- The LPH Laboratory System convenes a working committee of partners, including those from academia, to plan for addressing workforce shortages.
- The LPH Laboratory System identifies and shares available resources for workforce development with the agency and from system partners.

### Points for discussion:

Does the LPH Laboratory System:

- Monitor trends related to the laboratory workforce?
- Collaborate with partners to promote succession planning and leadership development?
- Raise awareness of laboratory career rewards and job opportunities?
- Promote laboratory career opportunities to middle school and high school counselors, teachers and students?
- Advocate for expansion of capacity for colleges and community colleges for training laboratory professionals?

### Evaluation:

| 8.3.2                                                                                                           | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## ESSENTIAL SERVICE #8 NEXT STEPS –

List top 2-3 possible next steps and rate as to importance (immediate, high, medium, low) and a contact person for each to address at a first meeting.

| NEXT STEPS | IMPORTANCE | SUGGESTED ACTIVITIES |
|------------|------------|----------------------|
|            |            |                      |
|            |            |                      |
|            |            |                      |

## ESSENTIAL SERVICE #9:

EVALUATE EFFECTIVENESS, ACCESSIBILITY AND QUALITY OF PERSONAL AND POPULATION-BASED SERVICES.

### INTENT:

Members of the LPH Laboratory System use the System's mission and purpose to regularly examine services and operations in the System to assure that the needs of the community continue to be met, the quality of services provided are high, and changes are made when quality and access objectives are not met.

### EXAMPLES OF SYSTEM PARTNER CONTRIBUTIONS TO THIS ESSENTIAL SERVICE

Assessment  
Communication  
Evaluation

Clinical services  
Performance evaluation  
Planning

### Model Standard 9.1: System Mission and Purpose

The LPH Laboratory System regularly evaluates its collective mission, the services provided and the technologies used.

### **MEASURABLE OBJECTIVES (SAMPLES):**

- The LPH Laboratory System mission is written and available to partners.
- The LPH Laboratory System test menus are regularly reviewed with partner input.
- Goals to achieve the mission are identified and monitored.

## 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.

### EXAMPLES:

- Copies of the system mission are distributed to all system members.
- An assessment of the system's performance is repeated periodically, using the L-SIP tool.
- System members has a system in place to regularly assess gaps in laboratory technology among public and private laboratories, including implementation of rapid test methods and data management.

### Points for Discussion:

Does the LPH Laboratory System:

- Have a mission clearly established, communicated, and re-examined on a regular basis?
- Have a methodology in place to routinely evaluate the scope of services provided within the LPH Laboratory System?
- Have a process in place to assess local laboratory system performance?
- Share results of the periodic evaluations among system partners?

### Evaluation:

| 9.1.1                                                                                                           | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot issues:

## Model Standard 9.2: System Effectiveness, Accessibility and Quality

The effectiveness, accessibility and quality of personal and population-based laboratory services provided throughout the local jurisdiction are regularly evaluated.

### **MEASURABLE OBJECTIVES (SAMPLES):**

- There is a process to regularly evaluate the contribution of laboratory services to health outcomes, both at the population level and the personal services level.
- There is a mechanism to regularly assess gaps in the testing performed by the LPH Laboratory System.
- The quality of laboratory testing performed by the LPH Laboratory System is assessed using proficiency testing performance.

## KEY IDEA 9.2.1

The effectiveness of the personal and population-based laboratory services provided throughout the local jurisdiction is regularly evaluated.

### EXAMPLES:

- The range of services as related to the LPH Laboratory System mission and purpose are evaluated on a regular basis.
- The results of effectiveness assessments are used to assist with policy development and resource allocation.
- Quality indicators exist to measure the effectiveness of services.

### Points for Discussion:

Does the LPH Laboratory System:

- Have a process in place to evaluate the effectiveness of services in the LPH Laboratory System?
- Have a plan and the resources for tracking the contribution of laboratory services to health outcomes over time?
- Have collaborative working relationships among system constituents in place and functioning successfully?

### Evaluation:

| 9.2.1                                                                                                           | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## KEY IDEA 9.2.2

The availability of personal and population-based laboratory services throughout the local jurisdiction is regularly evaluated.

### EXAMPLES:

- Studies are conducted of the cost of laboratory services.
- Community organizations and entities that contribute to the delivery of laboratory services are identified.

### Points for Discussion:

Does the LPH Laboratory System:

- Have a process in place to evaluate the availability of services in the LPH Laboratory System?
- Regularly review utilization of laboratory services around the state?
- Have a process in place to assess laboratory system capacity?

### Evaluation:

| 9.2.2                                                                                                           | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## KEY IDEA 9.2.3

The quality of personal and population-based laboratory services provided throughout the local jurisdiction is regularly evaluated.

### EXAMPLES:

- Customer satisfaction with laboratory services is measured.
- Laboratories in the LPH Laboratory System participate in a certification, accreditation, or licensure program.
- Quality indicators exist to measure the quality of services.

### Points for Discussion:

Does the LPH Laboratory System:

- Have a process in place to evaluate the quality of services in the LPH Laboratory System?
- Use results of quality assessments to assist with policy development or resource allocation?
- Identify opportunities for improvements across the LPH Laboratory System?

### Evaluation:

| 9.2.3                                                                                                           | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## ESSENTIAL SERVICE #9 NEXT STEPS –

List top 2-3 possible next steps and rate as to importance (immediate, high, medium, low) and a contact person for each to address at a first meeting.

| NEXT STEPS | IMPORTANCE | SUGGESTED ACTIVITIES |
|------------|------------|----------------------|
|            |            |                      |
|            |            |                      |
|            |            |                      |

## ESSENTIAL SERVICE #10: RESEARCH FOR INSIGHTS AND INNOVATIVE SOLUTIONS TO HEALTH PROBLEMS

### INTENT:

Partners of the LPH Laboratory System collaborate in public health systems and services research to find solutions to current health issues and problems encountered by System partners, and, thereby, contribute to the development of evidence-based solutions. The System utilizes the expertise and resources of a broad range of partners from the clinical and environmental laboratory arenas, academia, and other science-based disciplines. Research findings are evaluated and broadly disseminated.

### EXAMPLES OF SYSTEM PARTNER CONTRIBUTIONS TO THIS ESSENTIAL SERVICE

Clinical services  
Leadership  
Funding/Resources  
Innovation

Environmental awareness  
Planning  
Grant writing and managing experience  
Research

### Model Standard 10.1: Planning and Financing Research Activities

The LPH Laboratory System plans meaningful research and innovation activities.

#### MEASURABLE OBJECTIVES (SAMPLES):

- Research partners are identified in the LPH Laboratory System to collaborate and prioritize research needs.
- The system has a mechanism in place for identifying and tracking funding sources for research projects of relevance to the system.
- A tracking mechanism is in place to document reaching research project milestones that provides protection for human research subjects.

## 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.

### EXAMPLES:

- Resources and support to employees to become proficient at grant writing are provided.
- The need for and applicability of new technology are assessed.
- Information gathered from system performance assessment and/or quality improvement activities is used for planning of research, innovation in application and sharing (publications).
- Beta testing of a new product, methodology, or service is conducted.
- MOUs, similar agreements or processes are in place to establish and sustain research partnerships.

### Points for Discussion:

Does the LPH Laboratory System:

- Identify topics for research at the system level?
- Identify and collaborate with system partners and agencies to provide guidance for research projects and innovative solutions?
- Have an established process for recommending and evaluating research projects that support broad public health goals and public health systems and services research?
- Collaborate to obtain resources for research activities, (i.e., time, finances and staff)?
- Have access to institutional review boards (IRB) that provide protection for human research subjects?

### Evaluation:

| 10.1.1                                                                                                          | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## Model Standard 10.2: Implementation, Evaluation, and Dissemination

The LPH Laboratory System involves a broad range of partners to conduct and evaluate research of mutual, public health interest and to disseminate findings.

### **MEASURABLE OBJECTIVES (SAMPLES):**

- System members evaluate research projects to measure improvement and impacts from innovation.
- System members generate publications that acknowledge impacts of research on partners' activities.

## KEY IDEA 10.2.1

The LPH Laboratory System promotes research and innovative solutions.

### EXAMPLES:

- Non-laboratory representatives are included to provide feedback on key LPH Laboratory System research issues.
- The LPH Laboratory System has written agreements with Institutional Review Boards (IRB) and collaborators that include provisions for sharing of research data.
- The LPH Laboratory System has a process established for sharing research and innovation projects and findings.
- The LPH Laboratory System has representation on the local public health department's research committee or equivalent.

### Points for Discussion:

Does the LPH Laboratory System:

- Draw on diverse perspectives and expertise to stimulate innovative thinking?
- Encourage staff to identify and propose innovative solutions to workplace challenges?
- Have the ability to contribute to partnerships by incorporating new technology and scientific knowledge?
- Evaluate findings of research and implement applicable innovation to foster improvement?
- Disseminate research outcomes, best practices, and recognition of research activities?
- Collaborate with academic institutions to carry out clinical and translational science research?

### Evaluation:

| 10.2.1                                                                                                          | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## KEY IDEA 10.2.2

The LPH Laboratory System research is evaluated to foster improvement and innovation in application.

### EXAMPLES:

- The LPH Laboratory System has a process in place to track ongoing research partnership, grants with collaborators and any publication of research data.
- The LPH Laboratory System has a committee to track and evaluate applied research activities and innovations in projects applicable to program areas.
- The LPH Laboratory System has a system in place to support research in areas of public health interest (e.g., assistance in grant writing, budget; could be partnered with local universities and/or academic partners).

### Points for Discussion:

Does the LPH Laboratory System:

- Have a process in place to track research activities, innovation and outcomes?
- Have a mechanism in place for programmatic evaluation and implementation of innovative research findings?
- Conduct research that contributes to the health of the public in jurisdiction and beyond?

### Evaluation:

| 10.2.2                                                                                                          | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## KEY IDEA 10.2.3

The LPH Laboratory System disseminates (basic & applied) research outcomes, best practices and recognition of research activities.

### EXAMPLES:

- The LPH Laboratory System has a systems for partnering with area researchers (e.g. MOU, IRB or IBC in place).
- The LPH Laboratory System monitors and shares research outcomes, and best practices by attending meeting, posters, talks and publications.
- The LPH Laboratory System periodically meets clinical and academic partners, present research outcomes, and share best practices in laboratory management and innovation in diagnostic assay developments.

### Points for Discussion:

Does the LPH Laboratory System:

- Have agreements with IRB or IBC and collaborators for sharing research data?
- Have an established process/method in place for sharing research findings?
- Have mechanisms in place to recognize contributions made to innovative and applied health research?
- Generate publications (in peer-reviewed or invited literatures) to acknowledge impact of research on partners' services?
- Share "best practices" on systems research in laboratory science?

### Evaluation:

| 10.2.3                                                                                                          | None | Minimal | Moderate | Significant | Optimal |
|-----------------------------------------------------------------------------------------------------------------|------|---------|----------|-------------|---------|
| How would you rate the performance of the <u>LPH Laboratory System</u> collectively on achieving this Key Idea? |      |         |          |             |         |

### Parking Lot Issues:

## ESSENTIAL SERVICE #10 NEXT STEPS –

List top 2-3 possible next steps and rate as to importance (immediate, high, medium, low) and a contact person for each to address at a first meeting.

| NEXT STEPS | IMPORTANCE | SUGGESTED ACTIVITIES |
|------------|------------|----------------------|
|            |            |                      |
|            |            |                      |
|            |            |                      |



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