The Public Health Need for ETOR
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A Fundamental Capability for Public Health Laboratories

The nation depends on public health laboratories to conduct critical and complex tests to keep our country safe from emergent threats, environmental contaminants, and food-borne illnesses. Accurate data and efficient turn around time for results is crucial. Electronic Test Orders and Results (ETOR) enables laboratories and health care providers to directly exchange test orders and results across different facilities and electronic information systems using agreed upon standards. The sooner laboratories receive and process test orders, the faster they can return results that are essential for surveillance, outbreak and public health emergency response and early intervention, which leads to better patient care.

ETOR is quickly becoming standard protocol across clinical laboratories, and is increasingly being defined as a required business need for providers.

Public Health Laboratories are Outdated

Labs are old-fashioned and been used for decades. They are inefficient and require manual entry of data.

Public Health Laboratories are Outdated

Outdated software makes it difficult to receive and process test orders.

How do we get there?

Legal Framework

Individual jurisdictions have unique legal frameworks around data exchange. Federal guidance, as well as a resource library with templates and data use sharing contract examples, would help mitigate complexity.

Funding

There must be sustained financial support to stand-up a comprehensive system. Connect to public and private partners. Use shared expertise to implement data sharing tools.

For More Information

Visit the Informatics Program area on www.aphl.org for more information on Informatics initiatives, FAQs, etc.

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Web Portals to Support ETOR

It is a significant undertaking for a laboratory to achieve ETOR functionality, and because every laboratory’s needs and capabilities are different, one size does not fit all. The use of web portals is a great way to enhance and support ETOR functionality, and allows for some additional customization. These web-based tools allow stakeholders to submit test requests and receive test results in a timely and efficient manner through a shared centralized system. Portals eliminate the need for double data entry or transcribing handwritten requests, which greatly reduces data errors and man hours for the laboratory. Additionally, portals:

• Allow interaction between multiple stakeholders (e.g., laboratories, epidemiologists, CDC) both inside and outside the laboratory for a variety of use cases.
• Bypass the need to have a one-to-one connection with every provider’s information system.
• Serve as an opportunity to collect data from low-volume customers who don’t have the ability to build more complex systems or who otherwise would continue to use paper.

ETOR Considerations for Implementation

Establishing ETOR capability is an onerous and time-consuming initiative. Without an advocate in the laboratory, and commitment to the cause, achieving ETOR is unattainable. For a laboratory’s first use case, it is ideal to establish one interface with a trusted and equally committed customer or submitter who already has experience implementing ETOR. Specifically, the customer should be a high-volume submitter, for greater pay-off.

1. Define the team

• Staff and IT support on both the laboratory and provider side is critical. IT teams need to determine how they will address firewall issues and allow outside systems to interact.
• Who will be doing the integrated testing? Who will be ordering? Who will be accepting? They all need to be included early in the process to run through the actual scenarios and considerations.

2. Establish protocol with trading partners

• Laboratories and agencies need to identify their rules for account management, security for Health Information Portability and Accountability Act (HIPAA), support model, features, business rules for result access, legal review and disclaimers.
• Determine message transport mechanism (e.g., sFTP, PHINMS, Web Services, etc.) right away.
• Mutually agree to an implementation guide, determine the language of ETOR. Laboratories must be able to support their training and retention to ensure success.
• Staff and IT support on both the laboratory and provider side is critical. IT teams need to determine how they will address firewall issues and allow outside systems to interact.

3. Consider common scenarios that require decision making from the start

• Can a laboratory communicate add-on tests performed back to the provider if it wasn’t part of the initial request?
• Does the laboratory’s internal systems have the capacity to handle batched submissions in one request? Or do test orders need to be submitted separately?
• Can a test order include multiple tests for a single specimen?