ELECTRONIC TEST ORDERS AND RESULTS (ETOR)
A Fundamental Capability for Public Health Laboratories

APHL

THE PUBLIC HEALTH NEED FOR ETOR

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 standardized 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 — essential for surveillance, outbreak and public health emergency response and early intervention — leading 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 BEHIND THE CURVE

Out-dated technologies for sending time-sensitive data
Providers still have to rely on mail or fax to receive results — which can take up to a week.

Manual Data Entry
Hundreds of thousands of entries come through a laboratory, and each must be manually accepted and entered by staff. When data are missing, staff must contact providers to complete or verify the information — a time-consuming and error-prone process.

Inefficient Workflow
Laboratories are often not notified of incoming orders and specimens. Because test orders and specimens usually travel together, laboratories cannot anticipate or plan for what tests will need to be run beforehand and are unaware when a specimen is lost or does not arrive.

ETOR CAN BRING LABORATORIES INTO THE FUTURE

Real-Time Results
ETOR presents results to be viewed in near real-time, enabling quick action to be taken if needed for early intervention.

Electronic Data Entry
Providers send data that is already in their system. No data has to be duplicated and entered on the laboratory side. With ETOR, the sample, orders and results are all automatically linked to identification information of the patient - reducing workforce burden and leading to less errors.

Forecasting
Because the test order typically arrives before the sample, laboratories are able to prepare, schedule and appropriately determine needs in advance. If a specimen is overdue, the laboratory can contact the provider or shipper to prevent loss of critical or time-sensitive specimens.

HOW DO WE GET THERE?

Funding
There must be sustained financial support to stand-up a comprehensive system, connect networks, engage in fruitful public-private partnerships and employ experts to implement data sharing tools.

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.

Workforce
Skilled informatics professionals are essential for implementing, sustaining and improving initiatives like ETOR. Laboratories must be able to support their training and retention to ensure success.

Adoption & Buy-In
ETOR potential won't be achieved without complete buy-in and dedication from the laboratory and provider. Federal incentives, similar to Meaningful Use, could help drive adoption of an ETOR solution.