APHL Electronic Test Order and Result Initiatives
PHL ETOR Drivers

- PHLs need to remain competitive and relevant
- Informatics solutions need to be streamlined to meet increased data demands.
- Result data need to get into the right hands quickly
- Data are needed by multiple stakeholders
  - from the clinician to PH partners
Web Portal RFP distributed
- Supported thru CDC’s Division of TB elimination
- National DST reference center
- iConnect/Lab Web Portal (LWP) Selected

Programmatic Efforts to assist ETOR
- White paper / policy statement
- Standards Development (LOI/LRI)
- #1 priority of info subcommittee

LWP deployed on AIMS VPC
- 5 Antibiotic Resistance Lab Network (ARLN) regional labs
- National TB DST reference center project

HHS ONC ETOR process improvement
- Expand use of LWP to support emerging infectious disease use case.
- Expand to look at provider, lab and epi communication channels-
ETOR in the Clinical Domain

care & treatment / passive surveillance
ETOR in Public Health

active surveillance needed

**DETECT**  **REPORT**  **RESPOND**

critical
CRE Colonization Use Case:
Interrupt transmission asap

DETECT  REPORT

48 Hours
Public Health needs always evolve

For Zika virus testing eligibility:
www.publichealth.lacounty.gov/acc/Diseases/EpiForms/ZikaEligibility.pdf
For Zika virus testing and notification information:
www.publichealth.lacounty.gov/acc/ZikaTesting.htm
National Tuberculosis Drug Susceptibility Testing Reference Lab

Provide ETOR tools that support TB-DST shared services
Antibiotic Resistance Lab Network

Electronically report CRE colonization results to a network of cross-jurisdictional clinical and public health partners within 48 hours of specimen receipt.
ONC Idea Lab Project

Build on current ETOR efforts to enhance tools to support both private and public needs in the face of Zika and other emerging diseases
Approach

Selected competitively
LIMS agnostic
Centrally hosted
Lab Web Portal on AIMS
Why a web portal vs. Traditional ETOR (HL7)

HL7 standards (HL7 2.5.1 LOI/LRI) have had slow adoption rates
   Specialized knowledge needed
   Each time you add a test, it's like running around the house 7 times...(Dari)
   Most commercial labs (e.g. Quest) already have web portals
Couldn't wait any longer
   PHLs are launching LIMS specific portal extensions
   Same model as LIMS- now all the web portals will be disparate...
   Wanted to find something LIMS agnostic, flexible, and “Cloud-ready”
   to support mutual assistance and surge needs.
Collective Goals

• Document Existing and potential data flows
• Identify technology and process Impact to stakeholders
• Identify & validate Functional requirements
• Perform Gap Analysis between LWP and Requirements
• Develop Standards-based implementation guides
• Define user scenarios and prioritize enhancements to capture epidemiological relevant information
• Look for solutions to reduce the burden of PHL standards based data exchange.
APHL Informatics Messaging Services

25 Million
Messages Lifetime Transformed

20 Million
Messages/week Via Interface Engine Processing

26 Million
Number of Daily Security Log Files

~100
Number of Servers

160
Tracing Partners

13
States Cross Jurisdictional Exchange

2.5 TB
of WGS Data Processed and Counting

1 Million
Number of Quest ELR Messages Per Month

28,149
PHLIP Messages Per Month

63,070
Electronic Lab Results Per Month Excluding Quest

222,874
Syndromic Surveillance

Quest

Use Cases
APHL Committee Structure - where does this fit?

**Strategy**
- organizational

**Strategic Alignment**
- Programmatic- Big picture
- Member Focused

**Targeted Needs**
- Initiative Driven
- Concrete actions

**Innovation and Delivery**
- Time bound
- Single initiative/focus
Focused on specific technical challenges, advancements and trends in PHL informatics

– First project focused on the challenges of centralized IT infrastructure

– July 2017: ETOR selected as primary focus
ETOR: Divide and Conquer

- Complex initiative - needed to expand membership
- Technical, business and operational components
- Meeting the needs of the project sponsors and PH stakeholders
- APHL technical efforts come into play
  - AIMS/member services
  - Cloud Computing options
Technical Development Taskforce Charge:

**Short Term:** Refine and validate new functionality and deployment of the LWP solution on AIMS
  – ONC/APHL Lab/Epi support for EID/others

**Long Term:** Provide technical guidance on ETOR technology solutions and deployment options
Identify operational/institutional topics for BC taskforce to consider
So...as summer approaches and the mosquitos start to buzzzzz...

How can we better leverage our community to:

- Define and evolve common solutions to support both clinical and public health ETOR
- Identify the ETOR business case/operational drivers
Thank You!